

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

1 Identification

- **Product identifier**
- **Trade name:** VAN GIESON'S SOLUTION
- **Article number:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Electron Microscopy Sciences
 1560 Industry Road
 USA-Hatfield, PA 19440
 Tel: 215-412-8400 Fax: 215-412-8450
 email: sgkcck@aol.com
 www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
 ChemTrec 1-800-424-9300 Contract CCN7661
 1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS08 Health hazard

Muta. 2 H341 Suspected of causing genetic defects.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Met. Corr.1 H290 May be corrosive to metals.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Irrit. 2 H315 Causes skin irritation.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

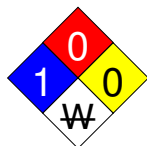
(Contd. of page 1)

· **Hazard pictograms**

GHS05 GHS06 GHS08

· **Signal word** *Danger*· **Hazard-determining components of labeling:**

2,4,6-trinitrophenol

· **Hazard statements***May be corrosive to metals.**Toxic if swallowed.**Harmful in contact with skin.**Causes skin irritation.**Causes serious eye damage.**Suspected of causing genetic defects.**May cause damage to organs through prolonged or repeated exposure.*· **Precautionary statements***Obtain special instructions before use.**Do not handle until all safety precautions have been read and understood.**Keep only in original container.**Do not breathe dust/fume/gas/mist/vapors/spray.**Wash thoroughly after handling.**Do not eat, drink or smoke when using this product.**Wear protective gloves/protective clothing/eye protection/face protection.**If swallowed: Immediately call a poison center/doctor.**Specific treatment (see on this label).**Rinse mouth.**If on skin: Wash with plenty of water.**If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**IF exposed or concerned: Get medical advice/attention.**Call a poison center/doctor if you feel unwell.**Get medical advice/attention if you feel unwell.**Take off contaminated clothing and wash it before reuse.**If skin irritation occurs: Get medical advice/attention.**Absorb spillage to prevent material damage.**Store locked up.**Store in corrosive resistant container with a resistant inner liner.**Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

The substance demonstrates unusual reactivity with water.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 2)

- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

88-89-1	2,4,6-trinitrophenol	≤2.5%
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4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 3)

- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:		
88-89-1	2,4,6-trinitrophenol	0.3 mg/m ³
· PAC-2:		
88-89-1	2,4,6-trinitrophenol	17 mg/m ³
· PAC-3:		
88-89-1	2,4,6-trinitrophenol	100 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:	
88-89-1 2,4,6-trinitrophenol	
PEL	Long-term value: 0.1 mg/m ³ Skin
REL	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³ Skin
TLV	Long-term value: 0.1 mg/m ³

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 4)

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	Yellow tint
Odor:	Characteristic
Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not flammable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 5)

· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Water:	98.4 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gl
Solids content:	1.6 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
 - **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Strong irritant with the danger of severe eye injury.
 - **Sensitization:** No sensitizing effects known.
 - **Additional toxicological information:**
- The product shows the following dangers according to internally approved calculation methods for preparations:
- Toxic
Harmful
Irritant

(Contd. on page 7)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 6)

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**

- **DOT, ADR, IMDG, IATA** Void

- **UN proper shipping name**

- **DOT, ADR, IMDG, IATA** Void

- **Transport hazard class(es)**

- **DOT, ADR, IMDG, IATA**

- **Class** Void

- **Packing group**

- **DOT, ADR, IMDG, IATA** Void

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 7)

- | | |
|----------------------------------------------------------------------------------|-----------------|
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Void |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**
88-89-I | 2,4,6-trinitrophenol

- **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

- **TSCA new (21st Century Act) (Substances not listed)**
88-89-I | 2,4,6-trinitrophenol

- **Proposition 65**

- **Chemicals known to cause cancer:**
None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05 GHS06 GHS08

- **Signal word** Danger

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 8)

· **Hazard-determining components of labeling:**

2,4,6-trinitrophenol

· **Hazard statements**

May be corrosive to metals.

Toxic if swallowed.

Harmful in contact with skin.

Causes skin irritation.

Causes serious eye damage.

Suspected of causing genetic defects.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Rinse mouth.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

Absorb spillage to prevent material damage.

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 05/18/2018 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 9)

*OSHA: Occupational Safety Health**TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**Met. Corr. 1: Corrosive to metals – Category 1**Acute Tox. 3: Acute toxicity – Category 3**Acute Tox. 4: Acute toxicity – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Muta. 2: Germ cell mutagenicity – Category 2**STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

US

Safety Data Sheet

according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

1 Identification

- **Product identifier**
- **Trade name:** VAN GIESON'S SOLUTION
- **Article number:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- ProSciTech Pty Ltd
11 Carlton Street, Kirwan QLD 4817 Australia
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)
Website: ems.proscitech.com
- Emgrid Australia Pty. Ltd.
P.O. Box 118
The Patch VIC 3792
Australia
Tel: 03 9752 1785
Fax: 03 9752 1784
Website: www.emgrid.com.au
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

Eye Dam. 1 H318 Causes serious eye damage.

(Contd. on page 2)

Safety Data Sheet

according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 1)



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Irrit. 2 H315 Causes skin irritation.

· **Label elements**

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS05

GHS06

GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

2,4,6-trinitrophenol

· **Hazard statements**

May be corrosive to metals.

Toxic if swallowed.

Harmful in contact with skin.

Causes skin irritation.

Causes serious eye damage.

Suspected of causing genetic defects.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Specific treatment (see on this label).

Rinse mouth.

IF ON SKIN: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a POISON CENTER/doctor if you feel unwell.

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

Absorb spillage to prevent material damage.

Store locked up.

Store in corrosive resistant container /container with a corrosion resistant inner liner.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

(Contd. on page 3)

Safety Data Sheet

according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 2)

· **vPvB:** Not applicable.

3 Composition and Information on Ingredients

- **Chemical characterisation:** Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

88-89-1	2,4,6-trinitrophenol	≤2.5%
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- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety Data Sheet

according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 3)

See Section 13 for disposal information.

7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

88-89-1 2,4,6-trinitrophenol

WES	Long-term value: 0.1 mg/m ³
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- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 5)

Safety Data Sheet

according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 4)

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Colour:	Yellow tint
Odour:	Characteristic
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapour pressure at 20 °C:** 23 hPa

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:**

Fully miscible.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**

- **Dynamic:** Not determined.

- **Kinematic:** Not determined.

- **Solvent content:**

- **Water:** 98.4 %

- **VOC (EC)** 0.00 %

(Contd. on page 6)

Safety Data Sheet according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 5)

- | | |
|--------------------------|--------------------------------------------|
| Solids content: | 1.6 % |
| Other information | No further relevant information available. |

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Toxic
Harmful
Irritant
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Muta. 2

12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

AU

(Contd. on page 7)

Safety Data Sheet

according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 6)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number	
· ADG, ADN, IMDG, IATA	not regulated
· UN proper shipping name	
· ADG, ADN, IMDG, IATA	not regulated
· Transport hazard class(es)	
· ADG, ADN, IMDG, IATA	
· Class	not regulated
· Packing group	
· ADG, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· Australian Inventory of Chemical Substances	
88-89-1	2,4,6-trinitrophenol
7732-18-5	Deionized Water, Reagent Grade A.C.S.

· Standard for the Uniform Scheduling of Medicines and Poisons		
88-89-1	2,4,6-trinitrophenol	S4, S6

- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS05 GHS06 GHS08

- **Signal word** Danger

(Contd. on page 8)

Safety Data Sheet according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 7)

· **Hazard-determining components of labelling:**

2,4,6-trinitrophenol

· **Hazard statements**

May be corrosive to metals.

Toxic if swallowed.

Harmful in contact with skin.

Causes skin irritation.

Causes serious eye damage.

Suspected of causing genetic defects.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Specific treatment (see on this label).

Rinse mouth.

IF ON SKIN: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a POISON CENTER/doctor if you feel unwell.

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

Absorb spillage to prevent material damage.

Store locked up.

Store in corrosion resistant container /container with a corrosion resistant inner liner.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

(Contd. on page 9)

Safety Data Sheet
according to WHS Regulations

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Muta. 2: Germ cell mutagenicity – Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

(Contd. of page 8)

AU

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

1 Identification

- **Product identifier**
- **Trade name:** VAN GIESON'S SOLUTION
- **Article number:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Electron Microscopy Sciences
 1560 Industry Road
 USA-Hatfield, PA 19440
 Tel: 215-412-8400 Fax: 215-412-8450
 email: sgkcck@aol.com
 www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
 ChemTrec 1-800-424-9300 Contract CCN7661
 1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Toxicity (Oral) - Category 3

H301 Toxic if swallowed.



GHS08 Health hazard

Germ Cell Mutagenicity - Category 2

H341 Suspected of causing genetic defects.

Specific Target Organ Toxicity - Repeated Exposure - Category 2

H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Corrosive to Metals - Category 1

H290 May be corrosive to metals.

Serious Eye Damage - Category 1

H318 Causes serious eye damage.



GHS07

Acute Toxicity (Dermal) - Category 4

H312 Harmful in contact with skin.

Skin Irritation - Category 2

H315 Causes skin irritation.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 1)

· **Hazard pictograms**

GHS05 GHS06 GHS08

· **Signal word** *Danger*· **Hazard-determining components of labeling:**

2,4,6-trinitrophenol

· **Hazard statements***May be corrosive to metals.**Toxic if swallowed.**Harmful in contact with skin.**Causes skin irritation.**Causes serious eye damage.**Suspected of causing genetic defects.**May cause damage to organs through prolonged or repeated exposure.*· **Precautionary statements***Obtain special instructions before use.**Do not handle until all safety precautions have been read and understood.**Keep only in original packaging.**Do not breathe dust/fume/gas/mist/vapours/spray.**Wash thoroughly after handling.**Do not eat, drink or smoke when using this product.**Wear protective gloves/protective clothing/eye protection/face protection.**If swallowed: Immediately call a poison center/doctor.**Rinse mouth.**If on skin: Wash with plenty of water.**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**IF exposed or concerned: Get medical advice/attention.**Call a poison center/doctor if you feel unwell.**Get medical advice/attention if you feel unwell.**Take off contaminated clothing and wash it before reuse.**Specific measures (see on this label).**If skin irritation occurs: Get medical advice/attention.**Take off immediately all contaminated clothing.**Wash contaminated clothing before reuse.**Absorb spillage to prevent material-damage.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Hazard description:**· **WHMIS-symbols:***D1A - Very toxic material causing immediate and serious toxic effects**D2A - Very toxic material causing other toxic effects*

(Contd. on page 3)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 2)

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 0
Reactivity = 0

The substance demonstrates unusual reactivity with water.

- **HMIS-ratings (scale 0 - 4)**



Health = 1
Fire = 0
Reactivity = 0

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

88-89-1	2,4,6-trinitrophenol
---------	----------------------

1-5% w/w

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 3)

- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

88-89-1 2,4,6-trinitrophenol

EL	Long-term value: 0.1 mg/m ³ S(D)
EV	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³ Skin

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Contd. on page 5)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 4)

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	Yellow tint
Odor:	Characteristic
Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not flammable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapor pressure at 20 °C:** 23 hPa

· **Density:** Not determined.

· **Relative density** Not determined.

(Contd. on page 6)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 5)

· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Water:	98.4 %
Solids content:	1.6 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic
Harmful
Irritant
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 6)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*
- **Recommended cleansing agent:** *Water, if necessary with cleansing agents.*

14 Transport information

· UN-Number	
· DOT, TDG, ADN, IMDG, IATA	Void
· UN proper shipping name	
· DOT, TDG, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, TDG, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· DOT, TDG, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

(Contd. on page 8)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 7)

· **Section 313 (Specific toxic chemical listings):**

88-89-1	2,4,6-trinitrophenol
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· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

88-89-1	2,4,6-trinitrophenol
---------	----------------------

7732-18-5	Deionized Water, Reagent Grade A.C.S.
-----------	---------------------------------------

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

88-89-1	2,4,6-trinitrophenol
---------	----------------------

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05 GHS06 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

2,4,6-trinitrophenol

· **Hazard statements**

May be corrosive to metals.

Toxic if swallowed.

Harmful in contact with skin.

Causes skin irritation.

Causes serious eye damage.

Suspected of causing genetic defects.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep only in original packaging.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Rinse mouth.

If on skin: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

Specific measures (see on this label).

If skin irritation occurs: Get medical advice/attention.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/18/2018

Reviewed on 05/18/2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 8)

Take off immediately all contaminated clothing.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material-damage.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 05/18/2018 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

CA

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.05.2018

Revision: 18.05.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** VAN GIESON'S SOLUTION
- **Article number:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Irrit. 2 H315 Causes skin irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 1)

· Hazard pictograms



GHS05 GHS06 GHS08

· Signal word *Danger*

· Hazard-determining components of labelling:

2,4,6-trinitrophenol

· Hazard statements

H290 May be corrosive to metals.

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H341 Suspected of causing genetic defects.

H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P330 Rinse mouth.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 88-89-1	2,4,6-trinitrophenol	≤2.5%
EINECS: 201-865-9	Expl. 1.1, H201; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest provide artificial respiration.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 2)

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 3)

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

88-89-1 2,4,6-trinitrophenol

WEL Short-term value: 0.3 mg/m³Long-term value: 0.1 mg/m³

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· **General Information**

· **Appearance:**

Form: Liquid

Colour: Yellow tint

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 4)

· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gas):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Water:	98.4 %
VOC (EC)	0.00 %
Solids content:	1.6 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Toxic if swallowed.

(Contd. on page 6)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 5)

- Harmful in contact with skin.*
- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** *Based on available data, the classification criteria are not met.*
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity**
Suspected of causing genetic defects.
- **Carcinogenicity** *Based on available data, the classification criteria are not met.*
- **Reproductive toxicity** *Based on available data, the classification criteria are not met.*
- **STOT-single exposure** *Based on available data, the classification criteria are not met.*
- **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** *Based on available data, the classification criteria are not met.*

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **12.2 Persistence and degradability** *No further relevant information available.*
- **12.3 Bioaccumulative potential** *No further relevant information available.*
- **12.4 Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **12.6 Other adverse effects** *No further relevant information available.*

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** *Disposal must be made according to official regulations.*
- **Recommended cleansing agents:** *Water, if necessary together with cleansing agents.*

SECTION 14: Transport information

- | | |
|---------------------------------------|----------------------|
| · 14.1 UN-Number | |
| · ADR, ADN, IMDG, IATA | <i>not regulated</i> |
| · 14.2 UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | <i>not regulated</i> |

(Contd. on page 7)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.05.2018

Revision: 18.05.2018

Trade name: VAN GIESON'S SOLUTION

(Contd. of page 6)

· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	not regulated
· 14.4 Packing group	
· ADR, IMDG, IATA	not regulated
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	not regulated

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H201 Explosive; mass explosion hazard.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Expl. 1.1: Explosives – Division 1.1

Met. Corr.1: Corrosive to metals – Category 1

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2018.05.18

在 2018.05.18 审核

1 化学品及企业标识

- **产品识别者**
- **化学品中文(英文)名称, 化学品俗名或商品名:** VAN GIESON'S SOLUTION
- **商品编号:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05
- **相应纯物质或者混合物的相关下位用途及禁止用途** 无相关详细资料。
- **原材料的应用/准备工作进行** 实验室化学物
- **安全技术说明书内供应商详细信息**
- **企业名称:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **可获取更多资料的部门:** Product safety department
- **紧急联系电话号码:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 危险性概述

- **紧急情况概述:**

黄色, 液体, 可能腐蚀金属。 吞咽会中毒。 皮肤接触有害。 吸入可能有害。 造成皮肤刺激。 造成严重眼损伤。 怀疑会导致遗传性缺陷。 长期或反复接触可能对器官造成伤害。

- **GHS危险性类别**



骷髅和交叉骨

急性毒性(经口) 第3类

H301 吞咽会中毒



健康危害

生殖细胞致突变性 第2类

H341 怀疑会导致遗传性缺陷

特定靶器官系统毒性(重复接触) 第2类 H373 长期或反复接触可能对器官造成伤害



腐蚀

金属腐蚀物 第1类

H290 可能腐蚀金属

严重眼睛损伤/眼睛刺激性 第1类

H318 造成严重眼损伤



急性毒性(经皮肤) 第4类

H312 皮肤接触有害

皮肤腐蚀/刺激 第2类

H315 造成皮肤刺激

急性毒性(吸入) 第5类

H333 吸入可能有害

- **标签因素**

- **GHS卷标元素** 本产品根据化学物质分类及标记全球协调制度(GHS)进行了分类及标记。

(在 2 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2018.05.18

在 2018.05.18 审核

化学品中文(英文)名称, 化学品俗名或商品名: VAN GIESON'S SOLUTION

(在 1 页继续)

· 图示



GHS05 GHS06 GHS08

· 名称 危险

· 标签上辨别危险的成份:

苦味酸

· 危险字句

可能腐蚀金属

吞咽会中毒

皮肤接触有害

吸入可能有害

造成皮肤刺激

造成严重眼损伤

怀疑会导致遗传性缺陷

长期或反复接触可能对器官造成伤害

· 警戒字句

· 事故响应

如误吞咽:立即呼叫急救中心/医生

具体治疗(见本标签上的)

漱口

如进入眼睛:用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出,取出隐形眼镜。继续冲洗

脱掉沾染的衣服,清洗后方可重新使用

· 安全储存

存放处须加锁

· 废弃处置

处置内装物/容器按照地方/区域/国家/国际规章

· 其他有害性

· PBT(残留性、生物浓缩性、毒性物质) 及 vPvB(高残留性、高生物浓缩性物质)评价结果

· PBT(残留性、生物浓缩性、毒性物质) 不适用的

· vPvB(高残留性、高生物浓缩性物质): 不适用的

3 成分/组成信息

· 混合物

· 描述: 由以下含有无害添加剂的成分组成的混合物

· 危险的成分:

88-89-1	苦味酸 爆炸物 第1.1类, H201; 急性毒性(径口) 第3类, H301; 急性毒性(径皮肤) 第3类, H311; 急性毒性(吸入) 第3类, H331	≤2.5%
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4 急救措施

· 应急措施要领

· 总说明:

马上脱下染有该产品的衣服。

中毒的症状可能会在几个小时以后才出现;因此在发生事故之后起码要有 48 小时的医疗观察。

万一出现了不规则的呼吸或呼吸的阻碍,请为病人提供人工呼吸。

(在 3 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2018.05.18

在 2018.05.18 审核

化学品中文(英文)名称, 化学品俗名或商品名 : VAN GIESON'S SOLUTION

(在 2 页继续)

- **吸入:** 万一病人不清醒时, 请让病人侧 躺以便移动.
- **皮肤接触:** 马上用水和肥皂进行彻底的冲洗.
- **眼睛接触:** 张开眼睛在流水下冲洗数分钟. 然后咨询医生.
- **食入:** 切勿引发呕吐; 请马上寻求医疗的协助.
- **给医生的资料:**
- **最重要的急慢性症状及其影响** 无相关详细资料.
- **需要及时的医疗处理及特别处理的症状** 无相关详细资料.

5 消防措施

- **灭火方法**
- **灭火的方法和灭火剂:** 使用适合四周环境的灭火措施.
- **特别危险性** 无相关详细资料.
- **特殊灭火方法**
- **消防人员特殊的防护装备:** 没有要求特别的措施.

6 泄漏应急处理

- **保护措施** 没有要求.
- **环境保护措施:**
用大量的水进行稀释.
切勿让其进入下水道/水面或地下水.
- **密封及净化方法和材料:**
吸收液体粘合原料 (沙粒、硅藻土、酸性粘合剂、通用粘合剂、锯屑).
根据第 13 条条款弃置受污染物.
确保有足够的通风装置.
- **参照其他部分**
有关安全处理的资料请参阅第 7 节.
有关个人防护装备的资料请参阅第 8 节.
有关弃置的资料请参阅第 13 节.

7 操作处置与储存

- **操作处置**
- **储存**
确保工作间有良好的通风/排气装置.
防止气溶胶的形成.
- **有关火灾及防止爆炸的资料:** 不需特别的措施.
- **混合危险性等安全储存条件**
- **储存:**
- **储存库和容器须要达到的要求:** 没有特别的要求.
- **有关使用一个普通的储存设施来储存的资料:** 不需要.
- **有关储存条件的更多资料:** 没有.
- **具体的最终用户** 无相关详细资料.

8 接触控制和个体防护

- **工程控制方法:** 没有进一步数据; 见第 7 项.

(在 4 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2018.05.18

在 2018.05.18 审核

化学品中文(英文)名称, 化学品俗名或商品名 : VAN GIESON'S SOLUTION

(在 3 页继续)

· 控制变数

· 在工作场需要监控的限值成分

88-89-1 苦味酸

OEL (CN) PC-TWA: 0.1 mg/m³PEL (TW) PC-TWA: 0.1 mg/m³

· 额外的资料: 制作期间有效的清单将作为基础来使用.

· 泄漏控制

· 个人防护设备:

· 一般保护和卫生措施:

远离食品、饮料和饲料.

立即除去所有的不洁的和被污染的衣服.

在休息之前和工作完毕后请清洗双手.

避免和皮肤接触.

避免和眼睛及皮肤接触.

· 呼吸系统防护:

如果曾短暂接触或在低污染的情况下, 请使用呼吸过滤装置. 如果曾深入或较长时间接触, 请使用独立的呼吸保护装置.

· 手防护:



保护手套

手套的物料必须是不渗透性的, 且能抵抗该产品/物质/添加剂.

基于缺乏测试, 对于产品/制剂/化学混合物, 并不会提供手套材料的建议

选择手套材料时, 请注意材料的渗透时间, 渗透率和降解参数

· 手套材料

选择合适的手套不单取决于材料, 亦取决于质量特征, 以及来自哪一间生产厂家, 因为该产品是由很多材料配制而成, 手套材料的抵抗力并不可预计, 所以, 必须在使用之前进行检查

· 渗入手套材料的时间 请向劳保手套生产厂家获取准确的破裂时间并观察实际的破裂时间

· 眼睛防护:



密封的护目镜

9 理化特性

· 有关基本物理及化学特性的信息

· 一般说明

· 外观:

形状: 液体

颜色: 黄色

· 气味: 有特性的

· 嗅觉阈限 未决定.

· pH值: 未决定.

· 条件的更改

熔点: 未确定的

(在 5 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2018.05.18

在 2018.05.18 审核

化学品中文(英文)名称, 化学品俗名或商品名 : VAN GIESON'S SOLUTION

(在 4 页继续)

· 沸点/初沸点和沸程:	未确定的
· 闪点:	不适用的
· 可燃性(固体、气体):	不适用的
· 分解温度:	未决定.
· 自燃温度:	该产品是不自燃的
· 爆炸的危险性:	该产品并没有爆炸的危险
· 爆炸极限:	
较低:	未决定.
较高:	未决定.
· 蒸气压 在 20 °C:	23 hPa
· 密度:	未决定的
· 相对密度	未决定.
· 蒸气密度	未决定.
· 蒸发速率	未决定.
· 溶解性	
水:	完全可拌和的
· n-辛醇/水分配系数:	未决定.
· 黏性:	
动态:	未决定.
运动学的:	未决定.
· 溶剂成份:	
水:	98.4 %
· 固体成份:	1.6 %
· 其他信息	无相关详细资料。

10 稳定性和反应性

- 反应性 无相关详细资料。
- 稳定性
- 热分解/要避免的情况: 如果遵照规格使用则不会分解。
- 有害反应可能性 未有已知的危险反应。
- 应避免的条件 无相关详细资料。
- 不相容的物质: 无相关详细资料。
- 危险的分解产物: 未知有危险的分解产品。

11 毒理学信息

- 对毒性学影响的信息
 - 急性毒性:
 - 主要的刺激性影响:
 - 皮肤: 刺激皮肤和粘膜。
 - 在眼睛上面: 强烈的刺激性和造成严重伤害眼睛的危险。
 - 致敏作用: 没有已知的敏化影响。
 - 更多毒物的资料:
- 根据有关配制的一般欧盟分类指南的计算方法(刊印在最新版本),该产品显示以下的危险:

(在 6 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2018.05.18

在 2018.05.18 审核

化学品中文(英文)名称, 化学品俗名或商品名 : VAN GIESON'S SOLUTION

(在 5 页继续)

- 毒性的
- 有害的
- 刺激性的
- 对以下组别可能产生影响的数据:
- CMR作用 (致癌、导致基因突变、对生殖系统有害)
- 生殖细胞致突变性 第2类

12 生态学信息

- 生态毒性
- 水生毒性: 无相关详细资料。
- 持久性和降解性 无相关详细资料。
- 环境系统习性:
- 潜在的生物累积性 无相关详细资料。
- 土壤内移动性 无相关详细资料。
- 额外的生态学资料:
- 总括注解:
- 水危害级别 1(德国规例) (通过名单进行自我评估): 对水是稍微危害的
不要让未稀释或大量的产品接触地下水、水道或者污水系统。
- PBT(残留性、生物浓缩性、毒性物质) 及 vPvB(高残留性、高生物浓缩性物质)评价结果
- PBT(残留性、生物浓缩性、毒性物质) 不适用的
- vPvB(高残留性、高生物浓缩性物质): 不适用的
- 其他副作用 无相关详细资料。

13 废弃处置

- 废弃处置方法
- 建议: 不能将该产品和家居垃圾一起丢弃. 不要让该产品接触污水系统。
- 受污染的容器和包装:
- 建议: 必须根据官方的规章来丢弃。
- 建议的清洗剂: 如有必要请使用水及清洁剂进行清洁。

14 运输信息

- | | |
|------------------------|------|
| · 联合国危险货物编号(UN号) | |
| · ADR, ADN, IMDG, IATA | 无效 |
| · UN适当装船名 | |
| · ADR, ADN, IMDG, IATA | 无效 |
| · 运输危险等级 | |
| · ADR, ADN, IMDG, IATA | |
| · 级别 | 无效 |
| · 包装组别 | |
| · ADR, IMDG, IATA | 无效 |
| · 危害环境: | 不适用的 |

(在 7 页继续)

CN

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2018.05.18

在 2018.05.18 审核

化学品中文(英文)名称, 化学品俗名或商品名: VAN GIESON'S SOLUTION

(在 6 页继续)

- | | |
|--------------------------------------------------------------|------|
| · 用户特别预防措施 | 不适用的 |
| · MARPOL73/78(针对船舶引起的海洋污染预防协议)附件书2及根据IBC Code(国际装船货物编码)的大量运送 | 不适用的 |
| · UN "标准规定": | 无效 |

15 法规信息

- 对相应纯物质或者混合物的安全、保健及环境法规/法律
- 危险化学品安全管理条例

· 危险化学品目录

88-89-1 苦味酸

- 新化学物质环境管理办法

· 中国现有化学物质名录

列出所有成分

- GHS卷标元素 本产品根据化学物质分类及标记全球协调制度(GHS)进行了分类及标记。

· 图示



GHS05

GHS06

GHS08

- 名称 危险

· 标签上辨别危险的成份:

苦味酸

· 危险字句

可能腐蚀金属
 吞咽会中毒
 皮肤接触有害
 吸入可能有害
 造成皮肤刺激
 造成严重眼损伤
 怀疑会导致遗传性缺陷
 长期或反复接触可能对器官造成伤害

· 警戒字句

· 事故响应

如误吞咽:立即呼叫急救中心/医生

具体治疗(见本标签上的)

漱口

如进入眼睛:用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出,取出隐形眼镜。继续冲洗

脱掉沾染的衣服,清洗后方可重新使用

· 安全储存

存放处须加锁

· 废弃处置

处置内装物/容器按照地方/区域/国家/国际规章

(在 8 页继续)

化学品安全技术说明书

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打印日期 2018.05.18

在 2018.05.18 审核

化学品中文(英文)名称, 化学品俗名或商品名 : VAN GIESON'S SOLUTION

(在 7 页继续)

· **化学物质安全性评价:** 尚未进行化学物质安全性评价

16 其他信息

该资料是基于我们目前的知识。然而,这并不构成对任何特定产品特性的担保并且不建立一个法律上有效的合同关系。

缩写:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: 持久性生物累积性有毒物质

vPvB: very Persistent and very Bioaccumulative

爆炸物 第1.1类: Explosives – Division 1.1

金属腐蚀物 第1类: Corrosive to metals – Category 1

急性毒性(经口) 第3类: Acute toxicity – Category 3

急性毒性(经皮肤) 第4类: Acute toxicity – Category 4

急性毒性(吸入) 第5类: Acute toxicity – Category 5

皮肤腐蚀/刺激 第2类: Skin corrosion/irritation – Category 2

严重眼睛损伤/眼睛刺激性 第1类: Serious eye damage/eye irritation – Category 1

生殖细胞致突变性 第2类: Germ cell mutagenicity – Category 2

特定靶器官系统毒性 (重复接触) 第2类: Specific target organ toxicity (repeated exposure) – Category 2

CN

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 18.05.2018

Herziening van: 18.05.2018

RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

· 1.1 Productidentificatie

· **Handelsnaam:** VAN GIESON'S SOLUTION

· **Artikelnummer:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05

· **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**

Geen verdere relevante informatie verkrijgbaar.

· **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën

· 1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad

· **Fabrikant/leverancier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

Aurion

Binnenhaven 5

6709 PD Wageningen

The Netherlands

Tel: 31 317 415094

Fax: 31 317 415955

email: info@aurion.nl

· **Inlichtingengevende sector:** Product safety department

· **1.4 Telefoonnummer voor noodgevallen:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

RUBRIEK 2: Identificatie van de gevaren

· **2.1 Indeling van de stof of het mengsel**

· **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS06 doodshoofd met gekruiste beenderen

Acute Tox. 3 H301 Giftig bij inslikken.



GHS08 gezondheidsgevaar

Muta. 2 H341 Verdacht van het veroorzaken van genetische schade.

STOT RE 2 H373 Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.



GHS05 corrosie

Met. Corr.1 H290 Kan bijtend zijn voor metalen.

Eye Dam. 1 H318 Veroorzaakt ernstig oogletsel.



GHS07

(Vervolg op blz. 2)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 18.05.2018

Herziening van: 18.05.2018

Handelsnaam: VAN GIESON'S SOLUTION

(Vervolg van blz. 1)

*Acute Tox. 4 H312 Schadelijk bij contact met de huid.**Skin Irrit. 2 H315 Veroorzaakt huidirritatie.***2.2 Etiketteringselementen****Etikettering overeenkomstig Verordening (EG) nr. 1272/2008***Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.***Gevarenpictogrammen**

GHS05 GHS06 GHS08

Signaalwoord Gevaar**Gevaaraanduidende componenten voor de etikettering:***2,4,6-trinitrofenol***Gevarenaanduidingen***H290 Kan bijtend zijn voor metalen.**H301 Giftig bij inslikken.**H312 Schadelijk bij contact met de huid.**H315 Veroorzaakt huidirritatie.**H318 Veroorzaakt ernstig oogletsel.**H341 Verdacht van het veroorzaken van genetische schade.**H373 Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.***Veiligheidsaanbevelingen***P301+P310 NA INSLIKKEN: onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.**P321 Specifieke behandeling vereist (zie op dit etiket).**P330 De mond spoelen.**P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.**P362+P364 Verontreinigde kleding uittrekken en wassen alvorens deze opnieuw te gebruiken.**P405 Achter slot bewaren.**P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.***2.3 Andere gevaren****Resultaten van PBT- en zPzB-beoordeling****PBT:** Niet bruikbaar.**zPzB:** Niet bruikbaar.

RUBRIEK 3: Samenstelling en informatie over de bestanddelen

3.2 Chemische karakterisering: Mengsels**Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.**Gevaarlijke inhoudstoffen:**

CAS: 88-89-1	2,4,6-trinitrofenol	≤2,5%
EINECS: 201-865-9	Explosief (Exp. 1.1, H201); Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	

Aanvullende gegevens:*De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.*

(Vervolg op blz. 3)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 18.05.2018

Herziening van: 18.05.2018

Handelsnaam: VAN GIESON'S SOLUTION

(Vervolg van blz. 2)

RUBRIEK 4: Eerstehulpmaatregelen

· 4.1 Beschrijving van de eerstehulpmaatregelen

· Algemene informatie:

Verontreinigde kleding onmiddellijk uittrekken.

Het is mogelijk dat vergiftigingssymptomen pas na vele uren optreden. Om deze reden is medische controle gedurende minstens 48 uur na een ongeval noodzakelijk.

Bij onregelmatige ademhaling of ademstilstand kunstmatige ademhaling toepassen.

· **Na het inademen:** Bij bewusteloosheid ligging en vervoer in stabiele zijligging.

· **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.

· **Na oogcontact:** Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.

· **Na inslikken:** Geen braken teweegbrengen en onmiddellijk medische hulp raadplegen.

· **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.

· **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**

Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 5: Brandbestrijdingsmaatregelen

· 5.1 Blusmiddelen

· **Geschikte blusmiddelen:** Brandblusmaatregelen op omgeving afstemmen.

· **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**

Geen verdere relevante informatie verkrijgbaar.

· **5.3 Advies voor brandweerlieden**

· **Speciale beschermende kleding:** Geen bijzondere maatregelen nodig.

RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

· **6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting en noodprocedures** Niet nodig.

· **6.2 Milieuvorzorgsmaatregelen:**

Met veel water verdunnen.

Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.

· **6.3 InsluTINGS- en reinigingsmethoden en -materiaal:**

Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.

Besmet materiaal zoals afval volgens punt 13 verwijderen.

Voor voldoende ventilatie zorgen.

· **6.4 Verwijzing naar andere rubrieken**

Informatie inzake veilig gebruik - zie hoofdstuk 7.

Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.

Informatie inzake berging - zie hoofdstuk 13.

RUBRIEK 7: Hantering en opslag

· **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**

Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.

Aërosolvorming vermijden.

· **Informatie m.b.t. brand- en ontploffingsgevaar:** Geen bijzondere maatregelen noodzakelijk.

· **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**

· **Opslag:**

· **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.

· **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.

· **Verdere inlichtingen over eisen m.b.t. de opslag:** Geen.

(Vervolg op blz. 4)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 18.05.2018

Herziening van: 18.05.2018

Handelsnaam: VAN GIESON'S SOLUTION

(Vervolg van blz. 3)

· **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

· **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.· **8.1 Controleparameters**· **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**

88-89-1 2,4,6-trinitrofenol

WGW | Lange termijn waarde: 0,1 mg/m³· **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.· **8.2 Maatregelen ter beheersing van blootstelling**· **Persoonlijke beschermingsvoorzieningen:**· **Algemene beschermings- en gezondheidsmaatregelen:**

Verwijderd houden van eet- en drinkwaren.

Verontreinigde kleding onmiddellijk uittrekken.

Vóór de pauze en aan het einde van werktijd handen wassen.

Aanraking met de huid vermijden.

Aanraking met de ogen en de huid vermijden.

· **Ademhalingsbescherming:**

Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingsstoestel gebruiken.

· **Handbescherming:**

Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.

Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliën-mengsel afgegeven worden.

Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

· **Handschoenmateriaal**

De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.

· **Doordringingstijd van het handschoenmateriaal**

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

· **Oogbescherming:**

Nauw aansluitende veiligheidsbril

NL

(Vervolg op blz. 5)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 18.05.2018

Herziening van: 18.05.2018

Handelsnaam: VAN GIESON'S SOLUTION

(Vervolg van blz. 4)

RUBRIEK 9: Fysische en chemische eigenschappen

· 9.1 Informatie over fysische en chemische basiseigenschappen

· Algemene gegevens

· Voorkomen:

Vorm:	Vloeistof
Kleur:	Geelachtig
Geur:	Karakteristiek
Geurdrempelwaarde:	Niet bepaald.

· pH-waarde: Niet bepaald.

· Toestandsverandering

Smelt-/vriespunt:	Niet bepaald.
Beginkookpunt en kooktraject:	Niet bepaald.

· Vlampunt: Niet bruikbaar.

· Ontvlambaarheid (vast, gas): Niet bruikbaar.

· Ontledingstemperatuur: Niet bepaald.

· Zelfontbrandingstemperatuur: Het produkt ontbrandt niet uit zichzelf.

· Ontploffingseigenschappen: Het produkt is niet ontploffingsgevaarlijk.

· Ontploffingsgrenzen:

Onderste:	Niet bepaald.
Bovenste:	Niet bepaald.

· Dampspanning bij 20 °C: 23 hPa

· Dichtheid: Niet bepaald.

· Relatieve dichtheid: Niet bepaald.

· Dampdichtheid: Niet bepaald.

· Verdampingssnelheid: Niet bepaald.

· Oplosbaarheid in/mengbaarheid met

Water: Volledig mengbaar.

· Verdelingscoëfficiënt: n-octanol/water: Niet bepaald.

· Viscositeit

Dynamisch:	Niet bepaald.
Kinematisch:	Niet bepaald.

· Oplosmiddelgehalte:

Water:	98,4 %
VOC (EG)	0,00 %

Gehalte aan vaste bestanddelen: 1,6 %

· 9.2 Overige informatie: Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 10: Stabiliteit en reactiviteit

· 10.1 Reactiviteit: Geen verdere relevante informatie verkrijgbaar.

· 10.2 Chemische stabiliteit

· Thermische afbraak / te vermijden omstandigheden: Geen afbraak bij gebruik volgens voorschrift.

· 10.3 Mogelijke gevaarlijke reacties: Geen gevaarlijke reacties bekend.

· 10.4 Te vermijden omstandigheden: Geen verdere relevante informatie verkrijgbaar.

(Vervolg op blz. 6)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 18.05.2018

Herziening van: 18.05.2018

Handelsnaam: VAN GIESON'S SOLUTION

(Vervolg van blz. 5)

- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**
Gifstig bij inslikken.
Schadelijk bij contact met de huid.
- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**
Veroorzaakt huidirritatie.
- **Ernstig oogletsel/oogirritatie**
Veroorzaakt ernstig oogletsel.
- **Sensibilisatie van de luchtwegen/de huid**
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen**
Verdacht van het veroorzaken van genetische schade.
- **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij eenmalige blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij herhaalde blootstelling**
Kan schade aan organen veroorzaken bij langdurige of herhaalde blootstelling.
- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Verdere ecologische informatie:**
- **Algemene informatie:**
Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen
Gevaar voor water klasse 1 (D) (Zelfclassificatie): gevaar voor water klein
Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

(Vervolg op blz. 7)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 18.05.2018

Herziening van: 18.05.2018

Handelsnaam: VAN GIESON'S SOLUTION

(Vervolg van blz. 6)

· **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

RUBRIEK 14: Informatie met betrekking tot het vervoer

- | | |
|---------------------------------------------------------------------------------------------------------------|---------------------|
| · 14.1 VN-nummer
· ADR, ADN, IMDG, IATA | Niet van toepassing |
| · 14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN
· ADR, ADN, IMDG, IATA | Niet van toepassing |
| · 14.3 Transportgevarenklasse(n)
· ADR, ADN, IMDG, IATA
· klasse | Niet van toepassing |
| · 14.4 Verpakkingsgroep:
· ADR, IMDG, IATA | Niet van toepassing |
| · 14.5 Milieugevaren: | Niet bruikbaar. |
| · 14.6 Bijzondere voorzorgen voor de gebruiker | Niet bruikbaar. |
| · 14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code | Niet bruikbaar. |
| · VN "Model Regulation": | Niet van toepassing |

RUBRIEK 15: Regelgeving

- | |
|----------------------------------------------------------------------------------------------------------------------------------------|
| · 15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel |
| · SZW-lijst van kankerverwekkende stoffen
geen der bestanddelen staat op de lijst. |
| · SZW-lijst van mutagene stoffen
geen der bestanddelen staat op de lijst. |
| · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid
geen der bestanddelen staat op de lijst. |
| · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling
geen der bestanddelen staat op de lijst. |
| · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding
geen der bestanddelen staat op de lijst. |
| · Richtlijn 2012/18/EU |
| · Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I geen der bestanddelen staat op de lijst. |
| · Verordening (EG) nr. 1907/2006 BIJLAGE XVII Beperkingsvoorwaarden: 3 |
| · Nationale voorschriften: |
| · Gevaarklasse v. water: Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen |
| · 15.2 Chemischeveiligheidsbeoordeling: Een chemische veiligheidsbeoordeling is niet uitgevoerd. |

(Vervolg op blz. 8)

datum van de druk: 18.05.2018

Herziening van: 18.05.2018

Handelsnaam: VAN GIESON'S SOLUTION

(Vervolg van blz. 7)

RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

· **Relevante zinnen**

H201 Ontplobbare stof; gevaar voor massa-explosie.

H301 Giftig bij inslikken.

H311 Giftig bij contact met de huid.

H331 Giftig bij inademing.

· **Afkortingen en acroniemen:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Expl. 1.1: Ontplobbare stoffen – Subklasse 1.1

Met. Corr.1: Bijtend voor metalen – Categorie 1

Acute Tox. 3: Acute toxiciteit – Categorie 3

Acute Tox. 4: Acute toxiciteit – Categorie 4

Skin Irrit. 2: Huidcorrosie/-irritatie – Categorie 2

Eye Dam. 1: Ernstig oogletsel/oogirritatie – Categorie 1

Muta. 2: Mutageniteit in geslachtscellen – Categorie 2

STOT RE 2: Specifieke doelorgaantoxiciteit bij herhaalde blootstelling – Categorie 2

Käyttöturvallisuustiedote
1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 18.05.2018

Tarkistus: 18.05.2018

KOHTA 1: Aineen tai seoksen ja yhtiön tai yrityksen tunnistetiedot

- **1.1 Tuotetunniste**
- **Kauppanimike:** VAN GIESON'S SOLUTION
- **Artikkelinumero:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05
- **1.2 Aineen tai seoksen merkitykselliset tunnistetut käytöt ja käytöt, joita ei suositella**
Merkittäviä lisätietoja ei ole saatavilla.
- **Aineen / valmisteen käyttö** Laboratoriokemikaalit
- **1.3 Käyttöturvallisuustiedotteen toimittajan tiedot**
- **Valmistaja/toimittaja:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Tietoja antaa:** Product safety department
- **1.4 Häätöpuhelinnumero:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

KOHTA 2: Vaaran yksilöinti

- **2.1 Aineen tai seoksen luokitus**
- **Luokitus asetuksen (EY) N:o 1272/2008 mukaisesti**



GHS06 pääkallo ja ristikkäiset luut

Acute Tox. 3 H301 Myrkyllistä nieltynä.



GHS08 terveysvaara

Muta. 2 H341 Epäillään aiheuttavan perimävaurioita.

STOT RE 2 H373 Saattaa vahingoittaa elimiä pitkäaikaisessa tai toistuvassa altistumisessa.



GHS05 syöpyminen

Met. Corr.1 H290 Voi syövyttää metalleja.

Eye Dam. 1 H318 Vaurioittaa vakavasti silmiä.



GHS07

Acute Tox. 4 H312 Haitallista joutuessaan iholle.

Skin Irrit. 2 H315 Ärsyttää ihoa.

- **2.2 Merkinnät**
- **Merkinnät asetuksen (EY) N:o 1272/2008 mukaisesti** Tuote on luokiteltu ja merkitty CLP-asetuksen mukaan.

(jatkuu sivulla 2)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 18.05.2018

Tarkistus: 18.05.2018

Kauppanimike: VAN GIESON'S SOLUTION

(jatkuu sivulla 1)

· **Varoitusmerkit**

GHS05 GHS06 GHS08

· **Huomiosana Vaara**· **Vaaran määrävät komponentit etiketeissä:**

2,4,6-Trinitrofenoli

· **Vaaralausekkeet**

H290 Voi syövyttää metalleja.

H301 Myrkyllistä nieltynä.

H312 Haitallista joutuessaan iholle.

H315 Ärsyttää ihoa.

H318 Vaurioittaa vakavasti silmiä.

H341 Epäillään aiheuttavan perimävaurioita.

H373 Saattaa vahingoittaa elimiä pitkäaikaisessa tai toistuvassa altistumisessa.

· **Turvausekkeet**

P301+P310 JOS KEMIKAALIA ON NIELTY: Ota välittömästi yhteys MYRKYTYSTIETOKESKUKSEEN/lääkäriin.

P321 Erityishoitoa tarvitaan (katso pakkauksen merkinnöissä).

P330 Huuho suu.

P305+P351+P338 JOS KEMIKAALIA JOUTUU SILMIIN: Huuho huolellisesti vedellä usean minuutin ajan. Poista mahdolliset piilolinssit, jos sen voi tehdä helposti. Jatka huuhtomista.

P362+P364 Riisu saastunut vaateus ja pese ennen uudelleenkäyttöä.

P405 Varastoi lukitussa tilassa.

P501 Säilytä säiliö(t) noudattaen paikallisia/alueellisia/kansallisia/kansainvälisiä määräyksiä.

· **2.3 Muut vaarat**· **PBT- ja vPvB-arvioinnin tulokset**· **PBT:** Ei voida käyttää.· **vPvB:** Ei voida käyttää.

KOHTA 3: Koostumus ja tiedot aineosista

· **3.2 Kemialliset ominaisuudet: Seokset**· **Selostus:** Seuraavista aineista koostuva seos, jossa vaarattomia lisäaineita.· **Sisältää vaarallisia aineita:**

CAS: 88-89-1	2,4,6-Trinitrofenoli	≤2,5%
EINECS: 201-865-9	Expl. 1.1, H201; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	

· **Lisätietoja:** Annettujen turvaohjeiden sanamuoto kappaleesta 16.

KOHTA 4: Ensiaputoimenpiteet

· **4.1 Ensiaputoimenpiteiden kuvaus**· **Yleisohjeet:**

Aineen saastuttamat vaatekappaleet on riisuttava välittömästi.

Myrkytysoireet voivat ilmaantua vasta useiden tuntien kuluttua. Tästä syystä henkilöt on pidettävä lääkärin tarkkailun alaisena ainakin 48 tuntia onnettomuuden jälkeen.

Annettava tekehengitystä hengityksen ollessa epätasainen tai pysähtynyt.

(jatkuu sivulla 3)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 18.05.2018

Tarkistus: 18.05.2018

Kauppanimike: VAN GIESON'S SOLUTION

(jatkuu sivulla 2)

- **Hengitettynä:** Tajuton pidettävä ja kuljetettava kyljellään.
- **Ihokosketuksessa:** Pestävä heti vedellä ja saippualla ja huuhdottava hyvin.
- **Aineen päästyä silmiin:**
Silmiä huuhdotaan luomet auki juoksevan veden alla useita minuuotteja ja käännytään lääkärin puoleen.
- **Nieltyä:** Ei pakoteta oksentamaan, saatettava heti lääkärin hoitoon.
- **4.2 Tärkeimmät oireet ja vaikutukset, sekä välittömät että viivästyneet Merkittäviä lisätietoja ei ole saatavilla.**
- **4.3 Mahdollisesti tarvittavaa välitöntä lääketieteellistä apua ja erityishoitoa koskevat ohjeet**
Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 5: Palontorjuntatoimenpiteet

- **5.1 Sammutusaineet**
- **Sopivat sammutusaineet:** Palontorjuntatoimenpiteet ympäristöä vastaavasti.
- **5.2 Aineesta tai seoksesta johtuvat erityiset vaarat** Merkittäviä lisätietoja ei ole saatavilla.
- **5.3 Palontorjuntaa koskevat ohjeet**
- **Erityinen suojavarustus:** Erikoistoimenpiteitä ei tarvita.

KOHTA 6: Toimenpiteet onnettomuuspäästöissä

- **6.1 Varotoimenpiteet, henkilönsuojaimet ja menettely hätätilanteessa** Ei tarvita.
- **6.2 Ympäristöön kohdistuvat varoitimet:**
Ohennettava runsaalla vedellä.
Estettävä pääsy viemäreihin/pintavesiin/pohjaveteen.
- **6.3 Suojarakenteita ja puhdistusta koskevat menetelmät ja -välineet:**
Imettävä nestettä sitovalla aineella (hiekkä, piimaa, hapon sidosaine, yleisidosaine, sahajauho).
Saastunut aine on jätteenä hävitettävä kohdan 13 mukaisesti.
Huolehdittava riittävästä tuuletuksesta.
- **6.4 Viittaukset muihin kohtiin**
Turvallista käsittelyä koskevia ohjeita kappaleessa 7.
Henkilökohtaista suojavarustusta koskevia ohjeita kappaleessa 8.
Aineen hävitystä koskevia ohjeita kappaleessa 13.

KOHTA 7: Käsittely ja varastointi

- **7.1 Turvallisen käsittelyn edellyttämät toimenpiteet**
Huolehdittava hyvästä tuuletuksesta/imusta työpaikalla.
Vältettävä aerosolin muodostusta.
- **Palo- ja räjähdysuojaohjeet:** Erikoistoimenpiteitä ei tarvita.
- **7.2 Turvallisen varastoinnin edellyttämät olosuhteet, mukaan luettuina yhteensopimattomuudet**
- **Varastointi:**
- **Varastotiloille ja säiliöille asetettavat vaatimukset:** Ei erikoisvaatimuksia.
- **Yhteisvarastointiohjeet:** Ei tarvita.
- **Lisätietoja varastointiehtoihin:** Ei mitään.
- **7.3 Erityinen loppukäyttö** Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 8: Altistumisen ehkäiseminen ja henkilönsuojaimet

- **Lisäohjeita teknisten laitteiden varustukseen:** Ei muita tietoja, ks. kohta 7.

(jatkuu sivulla 4)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 18.05.2018

Tarkistus: 18.05.2018

Kauppanimike: VAN GIESON'S SOLUTION

(jatkuu sivulla 3)

· 8.1 Valvontaa koskevat muuttujat

· Aineosat työpaikkakohtaisin valvottavin raja-arvoin:

88-89-1 2,4,6-Trinitrofenoli

HTP	Lyhytaikaisarvo: 0,3 mg/m ³ Pitkäaikaisarvo: 0,1 mg/m ³ iho
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· **Lisäohjeet:** Tiedot perustuvat valmistushetkellä voimassaoleviin luetteloihin.

· 8.2 Altistumisen ehkäiseminen

· Henkilökohtainen suojavarustus:

· Yleiset suoja- ja hygieniatoimenpiteet:

Pidettävä loitolla elintarvikkeista, juomista ja rehuista.

Likaantuneet, aineen saastuttamat vaatekappaleet on riisuttava välittömästi.

Kädet on pestävä ennen taukoja ja työn päätyttyä.

Vältettävä ihokosketusta.

Vältettävä ihokosketusta ja kosketusta silmiin.

· Hengityssuoja:

Lyhytaikaisessa tai vähäisessä altistuksessa hengityssuojasuodin; intensiivisessä tai pitkäaikaisessa rasituksessa ulkoilmasta riippumaton hengityssuojain.

· Käsisuojaus:



Suojakäsineet

Käsin materiaalin tulee olla tuotetta/ainetta/valmistetta kestävä ja läpäisemätöntä.

Puuttuvien testien vuoksi suositusta soveltuvasta suojakäsine materiaalista tuotteelle/ valmisteelle / kemikaalisekoitteelle ei voida antaa.

Suojakäsine materiaalin valinnassa on otettava huomioon läpäisyajat, läpäisevyyskerroin ja kuluminen.

· Käsin materiaali

Soveltuvan käsinetyypin valikoima ei riipu yksinomaan materiaalista vaan myös muista laatuominaisuuksista ja vaihtelee eri valmistajilla. Koska tuote on valmiste, joka koostuu eri aineista, ei suojakäsine materiaalin kestävyys ole ennalta arvioitavissa vaan pitää tarkistaa ennen käyttöä.

· Käsin materiaalin läpäisy aika

Tarkka läpäisy aika on selvitettävä suojakäsine valmistajalta ja sitä on noudatettava.

· Silmäsuojus:



Tiiviit suojalasit

KOHTA 9: Fysikaaliset ja kemialliset ominaisuudet

· 9.1 Fysikaalisia ja kemiallisia perusominaisuuksia koskevat tiedot

· Yleiset ohjeet

· Olomuoto:

Muoto:

Neste

Väri:

Keltaiseen vivahtava

· Haju:

Tyypillinen

· Hajukynnys:

Ei määrittä.

(jatkuu sivulla 5)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 18.05.2018

Tarkistus: 18.05.2018

Kauppanimike: VAN GIESON'S SOLUTION

(jatkuu sivulla 4)

· pH-arvo:	Ei määritetty.
· Tilanmuutos	
Sulamis- tai jäätympiste:	Ei määritetty.
Kiehumispiste ja kiehumisalue:	Ei määritetty.
· Leimahduspiste:	Ei voida käyttää.
· Syttyvyys (kiinteät aineet, kaasut):	Ei voida käyttää.
· Hajoamislämpötila:	Ei määritetty.
· Itsesyttymislämpötila:	Tuote ei ole itsestään syttyvä.
· Räjähdyvyys:	Tuote ei ole räjähdysvaarallinen.
· Räjähdysrajat:	
Alempi:	Ei määritetty.
Ylempi:	Ei määritetty.
· Höyrypaine 20 °C lämpötilassa:	23 hPa
· Tiheys:	Ei määritetty.
· Suhteellinen tiheys	Ei määritetty.
· Höyryntiheys:	Ei määritetty.
· Haihtumisnopeus:	Ei määritetty.
· Liukenevuus/sekoittuvuus veteen:	Täydellisesti sekoittuva.
· Jakautumiskerroin: n-oktanoliväsi:	Ei määritetty.
· Viskositeetti:	
Dynaaminen:	Ei määritetty.
Kinemaattinen:	Ei määritetty.
· Liuotainepitoisuus:	
Vesi:	98,4 %
VOC (EY)	0,00 %
Kiinteainepitoisuus:	1,6 %
· 9.2 Muut tiedot	Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 10: Stabiilisuus ja reaktiivisuus

- **10.1 Reaktiivisuus** Merkittäviä lisätietoja ei ole saatavilla.
- **10.2 Kemiallinen stabiilisuus**
- **Terminen hajoavuus / vältettävät olosuhteet:** Ei hajoantumista määräysten mukaisessa käytössä.
- **10.3 Vaarallisten reaktioiden mahdollisuus** Ei tiedossa vaarallisia reaktioita.
- **10.4 Vältettävät olosuhteet** Merkittäviä lisätietoja ei ole saatavilla.
- **10.5 Yhteensopimattomat materiaalit:** Merkittäviä lisätietoja ei ole saatavilla.
- **10.6 Vaaralliset hajoamistuotteet:** Tiedossa ei ole vaarallisia hajoamistuotteita.

KOHTA 11: Myrkyllisyyteen liittyvät tiedot

- **11.1 Tiedot myrkyllisistä vaikutuksista**
- **Välitön myrkyllisyys**
Myrkyllistä nieltynä.

(jatkuu sivulla 6)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 18.05.2018

Tarkistus: 18.05.2018

Kauppanimike: VAN GIESON'S SOLUTION

(jatkuu sivulla 5)

- Haitallista joutuessaan iholle.
- **Ensisijainen ärsyttävä vaikutus:**
- **Ihosityövyttävyys/ihoärsytys**
Ärsyttää ihoa.
- **Vakava silmävaurio/silmä-ärsytys**
Vaurioittaa vakavasti silmiä.
- **Hengitysteiden tai ihon herkistyminen** Saatavilla olevien tietojen perusteella luokitus- kriteerit eivät täyty.
- **CMR-vaikutukset eli syöpää aiheuttavat, perimää vaurioittavat ja lisääntymiselle vaaralliset vaikutukset**
- **Sukusolujen perimää vaurioittavat vaikutukset**
Epäillään aiheuttavan perimävaurioita.
- **Syöpää aiheuttavat vaikutukset** Saatavilla olevien tietojen perusteella luokitus- kriteerit eivät täyty.
- **Lisääntymiselle vaaralliset vaikutukset** Saatavilla olevien tietojen perusteella luokitus- kriteerit eivät täyty.
- **Elinkohtainen myrkyllisyys – kerta-altistuminen**
Saatavilla olevien tietojen perusteella luokitus- kriteerit eivät täyty.
- **Elinkohtainen myrkyllisyys – toistuva altistuminen**
Saattaa vahingoittaa elimiä pitkäaikaisessa tai toistuvassa altistumisessa.
- **Aspiraatiovaara** Saatavilla olevien tietojen perusteella luokitus- kriteerit eivät täyty.

KOHTA 12: Tiedot vaarallisuudesta ympäristölle

- **12.1 Myrkyllisyys**
- **Vesimyrkyllisyys:** Merkittäviä lisätietoja ei ole saatavilla.
- **12.2 Pysyvyys ja hajoavuus** Merkittäviä lisätietoja ei ole saatavilla.
- **12.3 Biokertyvyys** Merkittäviä lisätietoja ei ole saatavilla.
- **12.4 Liikkuvuus maaperässä** Merkittäviä lisätietoja ei ole saatavilla.
- **Ekologisia lisätietoja:**
- **Yleisohjeita:**
Vesistövaarallisuusluokka 1 (Oma luokitus): lievästi vesistöä vaarantava
Estetään aineen pääsy ohentamattomana tai suurina määrinä pohjaveteen, vesistöihin, viemäristöön.
- **12.5 PBT- ja vPvB-arvioinnin tulokset**
- **PBT:** Ei voida käyttää.
- **vPvB:** Ei voida käyttää.
- **12.6 Muut haitalliset vaikutukset** Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 13: Jätteiden käsittelyyn liittyvät näkökohdat

- **13.1 Jätteiden käsittelymenetelmät**
- **Suositus:** Ei voida hävittää yhdessä talousjätteiden kanssa. Ei saa päästää viemäristöön.
- **Puhdistamattomat pakkaukset:**
- **Suositus:** Hävitettävä virallisten määräysten mukaisesti.
- **Suosittelava puhdistusaine:** Vesi, johon tarvittaessa lisätään puhdistusaineita.

KOHTA 14: Kuljetustiedot

- **14.1 YK-numero**
- **ADR, ADN, IMDG, IATA** tarpeeton
- **14.2 Kuljetuksessa käytettävä virallinen nimi**
- **ADR, ADN, IMDG, IATA** tarpeeton

(jatkuu sivulla 7)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 18.05.2018

Tarkistus: 18.05.2018

Kauppanimike: VAN GIESON'S SOLUTION

(jatkuu sivulla 6)

· 14.3 Kuljetuksen vaaraluokka	
· ADR, ADN, IMDG, IATA	
· luokka	tarpeeton
· 14.4 Pakkausryhmä	
· ADR, IMDG, IATA	tarpeeton
· 14.5 Ympäristövaarat:	Ei voida käyttää.
· 14.6 Erityiset varotoimet käyttäjälle	Ei voida käyttää.
· 14.7 Kuljetus irtolastina Marpol-sopimuksen II liitteen ja IBC-säännösten mukaisesti	Ei voida käyttää.
· UN "Model Regulation":	tarpeeton

KOHTA 15: Lainsäädäntöä koskevat tiedot

- **15.1 Nimenomaisesti ainetta tai seosta koskevat turvallisuus-, terveys- ja ympäristösäännökset tai -lainsäädäntö**
- **Direktiivi 2012/18/EU**
- **Nimetyt vaaralliset aineet - LIITE I sisältäviä aineita ei ole lueteltu**
- **NEUVOSTON ASETUS (EY) N:o 1907/2006 LIITE XVII Rajoitusehdot: 3**
- **15.2 Kemikaaliturvallisuusarviointi: Kemikaaliturvallisuusarviointia ei ole tehty.**

KOHTA 16: Muut tiedot

Annetut tiedot perustuvat tämänhetkisiin tietoihimme. Ne eivät kuitenkaan anna takuuta tuotteen ominaisuuksista eivätkä aikaansaa sopimuksellista oikeussuhdetta.

- **Asiaankuuluvat lausekkeet**
- H201 Räjähde; massaräjähdysvaara.
- H301 Myrkyllistä nieltynä.
- H311 Myrkyllistä joutuessaan iholle.
- H331 Myrkyllistä hengitettynä.
- **Lyhenteet ja lyhennykset:**
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Expl. 1.1: Räjähde – Vaarallisuusluokka 1.1
- Met. Corr.1: Metalleja syövyttävät aineet ja seokset – Katgoria 1
- Acute Tox. 3: Välitön myrkyllisyys – Katgoria 3
- Acute Tox. 4: Välitön myrkyllisyys – Katgoria 4
- Skin Irrit. 2: Ihosyövyttävyys/ihoärsytys – Katgoria 2
- Eye Dam. 1: Vakava silmävaurio/silmä-ärsytys – Katgoria 1
- Muta. 2: Sukusolujen perimää vaurioittavat vaikutukset – Katgoria 2
- STOT RE 2: Elinkohtainen myrkyllisyys (toistuva altistuminen) – Katgoria 2

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 18.05.2018

Révision: 18.05.2018

RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

· **1.1 Identificateur de produit**

· **Nom du produit:** VAN GIESON'S SOLUTION

· **Code du produit:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05

· **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**
Pas d'autres informations importantes disponibles.

· **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires

· **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**

· **Producteur/fournisseur:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

· **Service chargé des renseignements:** Product safety department

· **1.4 Numéro d'appel d'urgence:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

RUBRIQUE 2: Identification des dangers

· **2.1 Classification de la substance ou du mélange**

· **Classification selon le règlement (CE) n° 1272/2008**



GHS06 tête de mort sur deux tibias

Acute Tox. 3 H301 Toxique en cas d'ingestion.



GHS08 danger pour la santé

Muta. 2 H341 Susceptible d'induire des anomalies génétiques.

STOT RE 2 H373 Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.



GHS05 corrosion

Met. Corr.1 H290 Peut être corrosif pour les métaux.

Eye Dam. 1 H318 Provoque des lésions oculaires graves.



GHS07

Acute Tox. 4 H312 Nocif par contact cutané.

Skin Irrit. 2 H315 Provoque une irritation cutanée.

· **2.2 Éléments d'étiquetage**

· **Étiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.

(suite page 2)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 18.05.2018

Révision: 18.05.2018

Nom du produit: VAN GIESON'S SOLUTION

(suite de la page 1)

· Pictogrammes de danger



GHS05 GHS06 GHS08

· Mention d'avertissement Danger

· Composants dangereux déterminants pour l'étiquetage:

2,4,6-trinitrophénol

· Mentions de danger

H290 Peut être corrosif pour les métaux.

H301 Toxique en cas d'ingestion.

H312 Nocif par contact cutané.

H315 Provoque une irritation cutanée.

H318 Provoque des lésions oculaires graves.

H341 Susceptible d'induire des anomalies génétiques.

H373 Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.

· Conseils de prudence

P301+P310 **EN CAS D'INGESTION:** Appeler immédiatement un CENTRE ANTIPOISON/un médecin.

P321 Traitement spécifique (voir sur cette étiquette).

P330 Rincer la bouche.

P305+P351+P338 **EN CAS DE CONTACT AVEC LES YEUX:** rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.

P362+P364 Enlever les vêtements contaminés et les laver avant réutilisation.

P405 Garder sous clef.

P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

· 2.3 Autres dangers

· Résultats des évaluations PBT et vPvB

· **PBT:** Non applicable.· **vPvB:** Non applicable.

RUBRIQUE 3: Composition/informations sur les composants

· 3.2 Caractérisation chimique: Mélanges

· **Description:** Mélange des substances mentionnées à la suite avec des additifs non dangereux.

· Composants dangereux:

CAS: 88-89-1	2,4,6-trinitrophénol	≤2,5%
EINECS: 201-865-9	⚠ Expl. 1.1, H201; ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	

· **Indications complémentaires:** Pour le libellé des phrases de risque citées, se référer au chapitre 16.

RUBRIQUE 4: Premiers secours

· 4.1 Description des premiers secours

· Remarques générales:

Enlever immédiatement les vêtements contaminés par le produit.

(suite page 3)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 18.05.2018

Révision: 18.05.2018

Nom du produit: VAN GIESON'S SOLUTION

(suite de la page 2)

Les symptômes d'intoxication peuvent apparaître après de nombreuses heures seulement; une surveillance médicale est donc nécessaire au moins 48 heures après un accident.

Respiration artificielle dans le cas d'une respiration irrégulière ou d'un arrêt respiratoire.

- **Après inhalation:** En cas d'inconscience, coucher et transporter la personne en position latérale stable.
- **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.
- **Après contact avec les yeux:**
Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.
- **Après ingestion:** Ne pas faire vomir, demander d'urgence une assistance médicale.
- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.
- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**
Pas d'autres informations importantes disponibles.

RUBRIQUE 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:** Adapter les mesures d'extinction d'incendie à l'environnement.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Aucune mesure particulière n'est requise.

RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence** Pas nécessaire.
- **6.2 Précautions pour la protection de l'environnement:**
Diluer avec beaucoup d'eau.
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.
- **6.3 Méthodes et matériel de confinement et de nettoyage:**
Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).
Évacuer les matériaux contaminés en tant que déchets conformément au point 13.
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**
Veiller à une bonne ventilation/aspiration du poste de travail.
Éviter la formation d'aérosols.
- **Préventions des incendies et des explosions:** Aucune mesure particulière n'est requise.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:** Néant.

(suite page 4)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 18.05.2018

Révision: 18.05.2018

Nom du produit: VAN GIESON'S SOLUTION

(suite de la page 3)

· **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

· **Indications complémentaires pour l'agencement des installations techniques:**

Sans autre indication, voir point 7.

· **8.1 Paramètres de contrôle**

· **Composants présentant des valeurs-seuil à surveiller par poste de travail:**

88-89-1 2,4,6-trinitrophénol

VME	Valeur à long terme: 0,1 mg/m ³ Risque de pénétration percutanée
-----	--------------------------------------------------------------------------------

· **Remarques supplémentaires:**

Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

· **8.2 Contrôles de l'exposition**

· **Equipement de protection individuel:**

· **Mesures générales de protection et d'hygiène:**

Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.

Retirer immédiatement les vêtements souillés ou humectés.

Se laver les mains avant les pauses et en fin de travail.

Eviter tout contact avec la peau.

Eviter tout contact avec les yeux et avec la peau.

· **Protection respiratoire:**

En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

· **Protection des mains:**



Gants de protection

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.

À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

· **Matériau des gants**

Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.

· **Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

· **Protection des yeux:**



Lunettes de protection hermétiques

FR

(suite page 5)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 18.05.2018

Révision: 18.05.2018

Nom du produit: VAN GIESON'S SOLUTION

(suite de la page 4)

RUBRIQUE 9: Propriétés physiques et chimiques

· 9.1 Informations sur les propriétés physiques et chimiques essentielles	
· Indications générales	
· Aspect:	
Forme:	Liquide
Couleur:	Tirant sur le jaune
· Odeur:	Caractéristique
· Seuil olfactif:	Non déterminé.
· valeur du pH:	Non déterminé.
· Changement d'état	
Point de fusion/point de congélation:	Non déterminé.
Point initial d'ébullition et intervalle d'ébullition:	Non déterminé.
· Point d'éclair	Non applicable.
· Inflammabilité (solide, gaz):	Non applicable.
· Température de décomposition:	Non déterminé.
· Température d'auto-inflammabilité:	Le produit ne s'enflamme pas spontanément.
· Propriétés explosives:	Le produit n'est pas explosif.
· Limites d'explosion:	
Inférieure:	Non déterminé.
Supérieure:	Non déterminé.
· Pression de vapeur à 20 °C:	23 hPa
· Densité:	Non déterminée.
· Densité relative	Non déterminé.
· Densité de vapeur:	Non déterminé.
· Taux d'évaporation:	Non déterminé.
· Solubilité dans/miscibilité avec l'eau:	Entièrement miscible
· Coefficient de partage: n-octanol/eau:	Non déterminé.
· Viscosité:	
Dynamique:	Non déterminé.
Cinématique:	Non déterminé.
· Teneur en solvants:	
Eau:	98,4 %
VOC (CE)	0,00 %
· Teneur en substances solides:	
	1,6 %
· 9.2 Autres informations	Pas d'autres informations importantes disponibles.

RUBRIQUE 10: Stabilité et réactivité

- **10.1 Réactivité** Pas d'autres informations importantes disponibles.
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **10.3 Possibilité de réactions dangereuses** Aucune réaction dangereuse connue.
- **10.4 Conditions à éviter** Pas d'autres informations importantes disponibles.

(suite page 6)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 18.05.2018

Révision: 18.05.2018

Nom du produit: VAN GIESON'S SOLUTION

(suite de la page 5)

- **10.5 Matières incompatibles:** Pas d'autres informations importantes disponibles.
- **10.6 Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**
Toxique en cas d'ingestion.
Nocif par contact cutané.
- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**
Provoque une irritation cutanée.
- **Lésions oculaires graves/irritation oculaire**
Provoque des lésions oculaires graves.
- **Sensibilisation respiratoire ou cutanée**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagénicité sur les cellules germinales**
Susceptible d'induire des anomalies génétiques.
- **Cancérogénicité** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité pour la reproduction**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition unique**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition répétée**
Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.
- **Danger par aspiration** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Autres indications écologiques:**
- **Indications générales:**
Catégorie de pollution des eaux 1 (D) (Classification propre): peu polluant
Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

RUBRIQUE 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.

(suite page 7)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 18.05.2018

Révision: 18.05.2018

Nom du produit: VAN GIESON'S SOLUTION

(suite de la page 6)

- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.
- **Produit de nettoyage recommandé:** Eau, éventuellement avec des produits de nettoyage

RUBRIQUE 14: Informations relatives au transport

- | | |
|------------------------------------------------------------------------------------------------------|-----------------|
| · 14.1 Numéro ONU | |
| · ADR, ADN, IMDG, IATA | néant |
| · 14.2 Désignation officielle de transport de l'ONU | |
| · ADR, ADN, IMDG, IATA | néant |
| · 14.3 Classe(s) de danger pour le transport | |
| · ADR, ADN, IMDG, IATA | |
| · Classe | néant |
| · 14.4 Groupe d'emballage | |
| · ADR, IMDG, IATA | néant |
| · 14.5 Dangers pour l'environnement: | Non applicable. |
| · 14.6 Précautions particulières à prendre par l'utilisateur | Non applicable. |
| · 14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC | Non applicable. |
| · "Règlement type" de l'ONU: | néant |

RUBRIQUE 15: Informations relatives à la réglementation

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**
- **Directive 2012/18/UE**
- **Substances dangereuses désignées - ANNEXE I** Aucun des composants n'est compris.
- **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII** Conditions de limitation: 3
- **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

RUBRIQUE 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

- **Phrases importantes**
- H201 Explosif; danger d'explosion en masse.
- H301 Toxique en cas d'ingestion.
- H311 Toxique par contact cutané.
- H331 Toxique par inhalation.
- **Acronymes et abréviations:**
- ADR: Accord européen sur le transport des marchandises dangereuses par Route
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances

(suite page 8)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 18.05.2018

Révision: 18.05.2018

Nom du produit: VAN GIESON'S SOLUTION

(suite de la page 7)

*CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Expl. 1.1: Explosibles – Division 1.1**Met. Corr.1: Substances ou mélanges corrosifs pour les métaux – Catégorie 1**Acute Tox. 3: Toxicité aiguë – Catégorie 3**Acute Tox. 4: Toxicité aiguë – Catégorie 4**Skin Irrit. 2: Corrosion cutanée/irritation cutanée – Catégorie 2**Eye Dam. 1: Lésions oculaires graves/irritation oculaire – Catégorie 1**Muta. 2: Mutagénicité sur les cellules germinales – Catégorie 2**STOT RE 2: Toxicité spécifique pour certains organes cibles (exposition répétée) – Catégorie 2*

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Sicherheitsdatenblatt gemäß 1907/2006/EG, Artikel 31

Druckdatum: 18.05.2018

überarbeitet am: 18.05.2018

ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

- **1.1 Produktidentifikator**
- **Handelsname:** VAN GIESON'S SOLUTION
- **Artikelnummer:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches** Laborchemikalien
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com

Science Services GmbH
Unterhachinger Str. 75
81737 München Germany

Tel: +49(0)89 18 93 668-0
safety@scienceservices.de

Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, www.toxinfo.org
Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h
- **Auskunftgebender Bereich:** Product safety department
- **1.4 Notrufnummer:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

ABSCHNITT 2: Mögliche Gefahren

- **2.1 Einstufung des Stoffs oder Gemischs**
- **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS06 Totenkopf mit gekreuzten Knochen

Acute Tox. 3 H301 Giftig bei Verschlucken.



GHS08 Gesundheitsgefahr

Muta. 2 H341 Kann vermutlich genetische Defekte verursachen.

STOT RE 2 H373 Kann die Organe schädigen bei längerer oder wiederholter Exposition.



GHS05 Ätzwirkung

Met. Corr.1 H290 Kann gegenüber Metallen korrosiv sein.

Eye Dam. 1 H318 Verursacht schwere Augenschäden.

(Fortsetzung auf Seite 2)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

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Handelsname: VAN GIESON'S SOLUTION

(Fortsetzung von Seite 1)



GHS07

Acute Tox. 4 H312 Gesundheitsschädlich bei Hautkontakt.

Skin Irrit. 2 H315 Verursacht Hautreizungen.

· 2.2 Kennzeichnungselemente

· Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008

Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

· Gefahrenpiktogramme



GHS05

GHS06

GHS08

· Signalwort Gefahr

· Gefahrbestimmende Komponenten zur Etikettierung:

2,4,6-Trinitrophenol

· Gefahrenhinweise

H290 Kann gegenüber Metallen korrosiv sein.

H301 Giftig bei Verschlucken.

H312 Gesundheitsschädlich bei Hautkontakt.

H315 Verursacht Hautreizungen.

H318 Verursacht schwere Augenschäden.

H341 Kann vermutlich genetische Defekte verursachen.

H373 Kann die Organe schädigen bei längerer oder wiederholter Exposition.

· Sicherheitshinweise

P301+P310 BEI VERSCHLUCKEN: Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.

P321 Besondere Behandlung (siehe auf diesem Kennzeichnungsetikett).

P330 Mund ausspülen.

P305+P351+P338 BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen.

Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.

P362+P364 Kontaminierte Kleidung ausziehen und vor erneutem Tragen waschen.

P405 Unter Verschluss aufbewahren.

P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.

· 2.3 Sonstige Gefahren

· Ergebnisse der PBT- und vPvB-Beurteilung

· PBT: Nicht anwendbar.

· vPvB: Nicht anwendbar.

ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

· 3.2 Chemische Charakterisierung: Gemische

· Beschreibung: Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.

· Gefährliche Inhaltsstoffe:

CAS: 88-89-1	2,4,6-Trinitrophenol	≤2,5%
EINECS: 201-865-9	Expl. 1.1, H201; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	

(Fortsetzung auf Seite 3)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 18.05.2018

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Handelsname: VAN GIESON'S SOLUTION

(Fortsetzung von Seite 2)

· **Zusätzliche Hinweise:** Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

ABSCHNITT 4: Erste-Hilfe-Maßnahmen

· **4.1 Beschreibung der Erste-Hilfe-Maßnahmen**

· **Allgemeine Hinweise:**

Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.

Vergiftungssymptome können erst nach vielen Stunden auftreten, deshalb ärztliche Überwachung mindestens 48 Stunden nach einem Unfall.

Bei unregelmäßiger Atmung oder Atemstillstand künstliche Beatmung.

· **Nach Einatmen:** Bei Bewußtlosigkeit Lagerung und Transport in stabiler Seitenlage.

· **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.

· **Nach Augenkontakt:**

Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.

· **Nach Verschlucken:** Kein Erbrechen herbeiführen, sofort ärztliche Hilfe zuziehen.

· **4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**

Keine weiteren relevanten Informationen verfügbar.

· **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**

Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

· **5.1 Löschmittel**

· **Geeignete Löschmittel:** Feuerlöschmaßnahmen auf die Umgebung abstimmen.

· **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**

Keine weiteren relevanten Informationen verfügbar.

· **5.3 Hinweise für die Brandbekämpfung**

· **Besondere Schutzausrüstung:** Keine besonderen Maßnahmen erforderlich.

ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

· **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**
Nicht erforderlich.

· **6.2 Umweltschutzmaßnahmen:**

Mit viel Wasser verdünnen.

Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.

· **6.3 Methoden und Material für Rückhaltung und Reinigung:**

Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.

Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.

Für ausreichende Lüftung sorgen.

· **6.4 Verweis auf andere Abschnitte**

Informationen zur sicheren Handhabung siehe Abschnitt 7.

Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.

Informationen zur Entsorgung siehe Abschnitt 13.

ABSCHNITT 7: Handhabung und Lagerung

· **7.1 Schutzmaßnahmen zur sicheren Handhabung**

Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.

Aerosolbildung vermeiden.

(Fortsetzung auf Seite 4)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 18.05.2018

überarbeitet am: 18.05.2018

Handelsname: VAN GIESON'S SOLUTION

(Fortsetzung von Seite 3)

- **Hinweise zum Brand- und Explosionsschutz:** Keine besonderen Maßnahmen erforderlich.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:** Keine.
- **Lagerklasse:**
- **Klassifizierung nach Betriebsicherheitsverordnung (BetrSichV):**
Auf Metalle korrosiv wirkende Stoffe oder Gemische
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **8.1 Zu überwachende Parameter**

· **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**

88-89-1 2,4,6-Trinitrophenol

AGW	Langzeitwert: 0,1 E mg/m ³ 1(I);H, EU, 13
-----	---------------------------------------------------------

- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.
- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**
Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.
Beschmutzte, getränkte Kleidung sofort ausziehen.
Vor den Pausen und bei Arbeitsende Hände waschen.
Berührung mit der Haut vermeiden.
Berührung mit den Augen und der Haut vermeiden.
- **Atemschutz:**
Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.
- **Handschutz:**



Schutzhandschuhe

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

- **Handschuhmaterial**

Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

- **Durchdringungszeit des Handschuhmaterials**

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

(Fortsetzung auf Seite 5)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 18.05.2018

überarbeitet am: 18.05.2018

Handelsname: VAN GIESON'S SOLUTION

(Fortsetzung von Seite 4)

· Augenschutz:



Dichtschließende Schutzbrille

ABSCHNITT 9: Physikalische und chemische Eigenschaften

· 9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften

· Allgemeine Angaben

· Aussehen:

Form: Flüssigkeit

Farbe: Gelbstichig

· Geruch: Charakteristisch

· Geruchsschwelle: Nicht bestimmt.

· pH-Wert: Nicht bestimmt.

· Zustandsänderung

Schmelzpunkt/Gefrierpunkt: Nicht bestimmt.

Siedebeginn und Siedebereich: Nicht bestimmt.

· Flammpunkt: Nicht anwendbar.

· Entzündbarkeit (fest, gasförmig): Nicht anwendbar.

· Zersetzungstemperatur: Nicht bestimmt.

· Selbstentzündungstemperatur: Das Produkt ist nicht selbstentzündlich.

· Explosive Eigenschaften: Das Produkt ist nicht explosionsgefährlich.

· Explosionsgrenzen:

Untere: Nicht bestimmt.

Obere: Nicht bestimmt.

· Dampfdruck bei 20 °C: 23 hPa

· Dichte: Nicht bestimmt.

· Relative Dichte: Nicht bestimmt.

· Dampfdruck: Nicht bestimmt.

· Verdampfungsgeschwindigkeit: Nicht bestimmt.

· Löslichkeit in / Mischbarkeit mit

Wasser: Vollständig mischbar.

· Verteilungskoeffizient: n-Octanol/Wasser: Nicht bestimmt.

· Viskosität:

Dynamisch: Nicht bestimmt.

Kinematisch: Nicht bestimmt.

· Lösemittelgehalt:

Wasser: 98,4 %

VOC (EU): 0,00 %

Festkörpergehalt: 1,6 %

(Fortsetzung auf Seite 6)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 18.05.2018

überarbeitet am: 18.05.2018

Handelsname: VAN GIESON'S SOLUTION

(Fortsetzung von Seite 5)

· 9.2 Sonstige Angaben

Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität**
Giftig bei Verschlucken.
Gesundheitsschädlich bei Hautkontakt.
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut**
Verursacht Hautreizungen.
- **Schwere Augenschädigung/-reizung**
Verursacht schwere Augenschäden.
- **Sensibilisierung der Atemwege/Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- **Keimzell-Mutagenität**
Kann vermutlich genetische Defekte verursachen.
- **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**
Kann die Organe schädigen bei längerer oder wiederholter Exposition.
- **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**
Wassergefährdungsklasse 1 (Selbsteinstufung): schwach wassergefährdend
Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.

(Fortsetzung auf Seite 7)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 18.05.2018

überarbeitet am: 18.05.2018

Handelsname: VAN GIESON'S SOLUTION

(Fortsetzung von Seite 6)

- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.
- **Empfohlenes Reinigungsmittel:** Wasser, gegebenenfalls mit Zusatz von Reinigungsmitteln.

ABSCHNITT 14: Angaben zum Transport

- | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> · 14.1 UN-Nummer · ADR, ADN, IMDG, IATA entfällt |
| <ul style="list-style-type: none"> · 14.2 Ordnungsgemäße UN-Versandbezeichnung · ADR, ADN, IMDG, IATA entfällt |
| <ul style="list-style-type: none"> · 14.3 Transportgefahrenklassen · ADR, ADN, IMDG, IATA · Klasse entfällt |
| <ul style="list-style-type: none"> · 14.4 Verpackungsgruppe · ADR, IMDG, IATA entfällt |
| <ul style="list-style-type: none"> · 14.5 Umweltgefahren: Nicht anwendbar. |
| <ul style="list-style-type: none"> · 14.6 Besondere Vorsichtsmaßnahmen für den Verwender Nicht anwendbar. |
| <ul style="list-style-type: none"> · 14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code Nicht anwendbar. |
| <ul style="list-style-type: none"> · UN "Model Regulation": entfällt |

ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- **Richtlinie 2012/18/EU**
- **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Keiner der Inhaltsstoffe ist enthalten.
- **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII** Beschränkungsbedingungen: 3
- **Nationale Vorschriften:**

- **Technische Anleitung Luft:**

Klasse	Anteil in %
Wasser	98,4
I	1,6

- **Wassergefährdungsklasse: WGK I (Selbsteinstufung):** schwach wassergefährdend.

(Fortsetzung auf Seite 8)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 18.05.2018

überarbeitet am: 18.05.2018

Handelsname: VAN GIESON'S SOLUTION

(Fortsetzung von Seite 7)

- **Sonstige Vorschriften, Beschränkungen und Verbotsverordnungen**
Das Produkt unterliegt der Anlage 2 der Chemikalienverbotsverordnung (ChemVerbotsV) - Anforderungen in Bezug auf die Abgabe
- **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

- **Relevante Sätze**

H201 Explosiv, Gefahr der Massenexplosion.

H301 Giftig bei Verschlucken.

H311 Giftig bei Hautkontakt.

H331 Giftig bei Einatmen.

- **Abkürzungen und Akronyme:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Expl. 1.1: Explosive Stoffe/Gemische und Erzeugnisse mit Explosivstoff – Unterklasse 1.1

Met. Corr.1: Korrosiv gegenüber Metallen – Kategorie 1

Acute Tox. 3: Akute Toxizität – Kategorie 3

Acute Tox. 4: Akute Toxizität – Kategorie 4

Skin Irrit. 2: Hautreizende/-ätzende Wirkung – Kategorie 2

Eye Dam. 1: Schwere Augenschädigung/Augenreizung – Kategorie 1

Muta. 2: Keimzellmutagenität – Kategorie 2

STOT RE 2: Spezifische Zielorgan-Toxizität (wiederholte Exposition) – Kategorie 2

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 18.05.2018

Revisione: 18.05.2018

SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** VAN GIESON'S SOLUTION

· **Articolo numero:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05

· **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**
Non sono disponibili altre informazioni.

· **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio

· **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**

· **Produttore/fornitore:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

Societa Italiana Chimici

Via Rio Nell Ellba 140

00138 Rome, Italy

Tel: 39 06 8800211

Fax: 39 30 06 8815313

Web: www.sichim.com

· **Informazioni fornite da:** Product safety department

· **1.4 Numero telefonico di emergenza:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

SEZIONE 2: Identificazione dei pericoli

· **2.1 Classificazione della sostanza o della miscela**

· **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS06 teschio e tibie incrociate

Acute Tox. 3 H301 Tossico se ingerito.



GHS08 pericolo per la salute

Muta. 2 H341 Sospettato di provocare alterazioni genetiche.

STOT RE 2 H373 Può provocare danni agli organi in caso di esposizione prolungata o ripetuta.



GHS05 corrosione

Met. Corr.1 H290 Può essere corrosivo per i metalli.

Eye Dam. 1 H318 Provoca gravi lesioni oculari.



GHS07

Acute Tox. 4 H312 Nocivo per contatto con la pelle.

(continua a pagina 2)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 18.05.2018

Revisione: 18.05.2018

Denominazione commerciale: VAN GIESON'S SOLUTION

(Segue da pagina 1)

*Skin Irrit. 2 H315 Provoca irritazione cutanea.***2.2 Elementi dell'etichetta****Etichettatura secondo il regolamento (CE) n. 1272/2008**

Il prodotto è classificato ed etichettato conformemente al regolamento CLP.

Pittogrammi di pericolo

GHS05 GHS06 GHS08

Avvertenza Pericolo**Componenti pericolosi che ne determinano l'etichettatura:**

2,4,6-trinitrofenolo

Indicazioni di pericolo

H290 Può essere corrosivo per i metalli.

H301 Tossico se ingerito.

H312 Nocivo per contatto con la pelle.

H315 Provoca irritazione cutanea.

H318 Provoca gravi lesioni oculari.

H341 Sospettato di provocare alterazioni genetiche.

H373 Può provocare danni agli organi in caso di esposizione prolungata o ripetuta.

Consigli di prudenzaP301+P310 **IN CASO DI INGESTIONE:** contattare immediatamente un CENTRO ANTIVELENI/un medico.

P321 Trattamento specifico (vedere su questa etichetta).

P330 Sciacquare la bocca.

P305+P351+P338 **IN CASO DI CONTATTO CON GLI OCCHI:** sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.

P362+P364 Togliere tutti gli indumenti contaminati e lavarli prima di indossarli nuovamente.

P405 Conservare sotto chiave.

P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

2.3 Altri pericoli**Risultati della valutazione PBT e vPvB**

PBT: Non applicabile.

vPvB: Non applicabile.

SEZIONE 3: Composizione/informazioni sugli ingredienti**3.2 Caratteristiche chimiche: Miscela**

Descrizione: Miscela delle seguenti sostanze con additivi non pericolosi.

Sostanze pericolose:

CAS: 88-89-1	2,4,6-trinitrofenolo	≤2,5%
EINECS: 201-865-9	⚠ Expl. 1.1, H201; ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	

Ulteriori indicazioni: Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

(continua a pagina 3)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 18.05.2018

Revisione: 18.05.2018

Denominazione commerciale: **VAN GIESON'S SOLUTION**

(Segue da pagina 2)

SEZIONE 4: Misure di primo soccorso

· **4.1 Descrizione delle misure di primo soccorso**

· **Indicazioni generali:**

Allontanare immediatamente gli abiti contaminati dal prodotto.

I sintomi di avvelenamento possono comparire dopo molte ore, per tale motivo è necessaria la sorveglianza di un medico nelle 48 ore successive all'incidente.

In caso di respirazione irregolare o di blocco respiratorio praticare la respirazione artificiale.

· **Inalazione:** Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.

· **Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.

· **Contatto con gli occhi:**

Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.

· **Ingestione:** Non provocare il vomito, chiamare subito il medico.

· **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.

· **4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**

Non sono disponibili altre informazioni.

SEZIONE 5: Misure antincendio

· **5.1 Mezzi di estinzione**

· **Mezzi di estinzione idonei:** Adottare provvedimenti antiincendio nei dintorni della zona colpita.

· **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.

· **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**

· **Mezzi protettivi specifici:** Non sono richiesti provvedimenti particolari.

SEZIONE 6: Misure in caso di rilascio accidentale

· **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza** Non necessario.

· **6.2 Precauzioni ambientali:**

Diluire abbondantemente con acqua.

Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.

· **6.3 Metodi e materiali per il contenimento e per la bonifica:**

Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).

Smaltimento del materiale contaminato conformemente al punto 13.

Provvedere ad una sufficiente areazione.

· **6.4 Riferimento ad altre sezioni**

Per informazioni relative ad un manipolazione sicura, vedere capitolo 7.

Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.

Per informazioni relative allo smaltimento vedere Capitolo 13.

SEZIONE 7: Manipolazione e immagazzinamento

· **7.1 Precauzioni per la manipolazione sicura**

Accurata ventilazione/aspirazione nei luoghi di lavoro.

Evitare la formazione di aerosol.

· **Indicazioni in caso di incendio ed esplosione:** Non sono richiesti provvedimenti particolari.

· **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**

· **Stoccaggio:**

· **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.

· **Indicazioni sullo stoccaggio misto:** Non necessario.

· **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Nessuno.

(continua a pagina 4)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 18.05.2018

Revisione: 18.05.2018

Denominazione commerciale: VAN GIESON'S SOLUTION

(Segue da pagina 3)

· **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

SEZIONE 8: Controllo dell'esposizione/protezione individuale

· **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.

· **8.1 Parametri di controllo**

· **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**

88-89-1 2,4,6-trinitrofenolo

TWA	Valore a lungo termine: 0,1 mg/m ³
-----	-----------------------------------------------

· **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.

· **8.2 Controlli dell'esposizione**

· **Mezzi protettivi individuali:**

· **Norme generali protettive e di igiene del lavoro:**

Tenere lontano da cibo, bevande e foraggi.

Togliere immediatamente gli abiti contaminati.

Lavarsi le mani prima dell'intervallo o a lavoro terminato.

Evitare il contatto con la pelle.

Evitare il contatto con gli occhi e la pelle.

· **Maschera protettiva:**

Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.

· **Guanti protettivi:**



Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.

A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.

Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

· **Materiale dei guanti**

La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego

· **Tempo di permeazione del materiale dei guanti**

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

· **Occhiali protettivi:**



Occhiali protettivi a tenuta

IT

(continua a pagina 5)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 18.05.2018

Revisione: 18.05.2018

Denominazione commerciale: **VAN GIESON'S SOLUTION**

(Segue da pagina 4)

SEZIONE 9: Proprietà fisiche e chimiche

· 9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali

· Indicazioni generali

· Aspetto:

Forma:	Liquido
Colore:	Tendente al giallo
· Odore:	Caratteristico
· Soglia olfattiva:	Non definito.

· valori di pH: Non definito.

· Cambiamento di stato

Punto di fusione/punto di congelamento:	Non definito.
Punto di ebollizione iniziale e intervallo di ebollizione:	Non definito.

· Punto di infiammabilità: Non applicabile.

· Infiammabilità (solidi, gas): Non applicabile.

· Temperatura di decomposizione: Non definito.

· Temperatura di autoaccensione: Prodotto non autoinfiammabile.

· Proprietà esplosive: Prodotto non esplosivo.

· Limiti di infiammabilità:

Inferiore:	Non definito.
Superiore:	Non definito.

· Tensione di vapore a 20 °C: 23 hPa

· Densità: Non definito.

· Densità relativa: Non definito.

· Densità di vapore: Non definito.

· Velocità di evaporazione: Non definito.

· Solubilità in/Miscibilità con acqua:

Completamente miscibile.

· Coefficiente di ripartizione: n-ottanolo/acqua: Non definito.

· Viscosità:

Dinamica:	Non definito.
Cinematica:	Non definito.

· Tenore del solvente:

Acqua:	98,4 %
VOC (CE)	0,00 %

 Contenuto solido: 1,6 %

· 9.2 Altre informazioni: Non sono disponibili altre informazioni.

SEZIONE 10: Stabilità e reattività

· 10.1 Reattività Non sono disponibili altre informazioni.

· 10.2 Stabilità chimica

· Decomposizione termica/ condizioni da evitare: Il prodotto non si decompone se utilizzato secondo le norme.

· 10.3 Possibilità di reazioni pericolose Non sono note reazioni pericolose.

(continua a pagina 6)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 18.05.2018

Revisione: 18.05.2018

Denominazione commerciale: VAN GIESON'S SOLUTION

(Segue da pagina 5)

- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta**
Tossico se ingerito.
Nocivo per contatto con la pelle.
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea**
Provoca irritazione cutanea.
- **Lesioni oculari gravi/irritazioni oculari gravi**
Provoca gravi lesioni oculari.
- **Sensibilizzazione respiratoria o cutanea**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**
- **Mutagenicità delle cellule germinali**
Sospettato di provocare alterazioni genetiche.
- **Cancerogenicità** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità per la riproduzione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**
Può provocare danni agli organi in caso di esposizione prolungata o ripetuta.
- **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

SEZIONE 12: Informazioni ecologiche

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**
Pericolosità per le acque classe 1 (D) (Autoclassificazione): poco pericoloso
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

(continua a pagina 7)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 18.05.2018

Revisione: 18.05.2018

Denominazione commerciale: VAN GIESON'S SOLUTION

(Segue da pagina 6)

· **Detergente consigliato:** Acqua eventualmente con l'aggiunta di detersivi.

SEZIONE 14: Informazioni sul trasporto

- | | |
|------------------------------------------------------------------------------------------------------------|-------------------------|
| · 14.1 Numero ONU
· ADR, ADN, IMDG, IATA | <i>non applicabile</i> |
| · 14.2 Nome di spedizione dell'ONU
· ADR, ADN, IMDG, IATA | <i>non applicabile</i> |
| · 14.3 Classi di pericolo connesso al trasporto
· ADR, ADN, IMDG, IATA
· Classe | <i>non applicabile</i> |
| · 14.4 Gruppo di imballaggio
· ADR, IMDG, IATA | <i>non applicabile</i> |
| · 14.5 Pericoli per l'ambiente: | <i>Non applicabile.</i> |
| · 14.6 Precauzioni speciali per gli utilizzatori | <i>Non applicabile.</i> |
| · 14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC | <i>Non applicabile.</i> |
| · UN "Model Regulation": | <i>non applicabile</i> |

SEZIONE 15: Informazioni sulla regolamentazione

- **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**
- **Direttiva 2012/18/UE**
- **Sostanze pericolose specificate - ALLEGATO I** Nessuno dei componenti è contenuto.
- **REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII** Restrizioni: 3
- **15.2 Valutazione della sicurezza chimica:** Una valutazione della sicurezza chimica non è stata effettuata.

SEZIONE 16: Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

· **Frase rilevanti**

H201 Esplosivo; pericolo di esplosione di massa.

H301 Tossico se ingerito.

H311 Tossico per contatto con la pelle.

H331 Tossico se inalato.

· **Abbreviazioni e acronimi:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

(continua a pagina 8)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 18.05.2018

Revisione: 18.05.2018

Denominazione commerciale: VAN GIESON'S SOLUTION

(Segue da pagina 7)

*vPvB: very Persistent and very Bioaccumulative**Expl. 1.1: Esplosivi – Divisione 1.1**Met. Corr.1: Sostanze o miscele corrosive per i metalli – Categoria 1**Acute Tox. 3: Tossicità acuta – Categoria 3**Acute Tox. 4: Tossicità acuta – Categoria 4**Skin Irrit. 2: Corrosione/irritazione della pelle – Categoria 2**Eye Dam. 1: Gravi lesioni oculari/irritazione oculare – Categoria 1**Muta. 2: Mutagenicità sulle cellule germinali – Categoria 2**STOT RE 2: Tossicità specifica per organi bersaglio (esposizione ripetuta) – Categoria 2*

IT

물질안전보건자료 GHS에 따라

기압점: 2018.05.18

개정: 2018.05.18

1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명: VAN GIESON'S SOLUTION**
- **상품번호:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05
- **해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도** 추가적인 정보가 존재하지 않습니다.
- **제품의 권고 용도와 사용상의 제한:** 실험실화학품
- **안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보**
- **제조자/수입자/유통업자 정보:**
 Electron Microscopy Sciences
 1560 Industry Road
 USA-Hatfield, PA 19440
 Tel: 215-412-8400 Fax: 215-412-8450
 email: sgkcck@aol.com
 www.emsdiasum.com
- **Samchang Commercial Co., Ltd.**
 Yeo Eui Do
 PO Box 1110
 Seoul, Korea
 Tel: 82 2 703 3040
 Fax: 82 2 717 3298
- **추가적인 정보 획득 가능:** Product safety department
- **비상연락 전화번호:**
 ChemTrec 1-800-424-9300 Contract CCN7661
 1-703-527-3887

2 유해성·위험성

- **순물질 또는 혼합물의 분류**



두개골과 대퇴골

급성 독성 - 경구 - 구분 3

H301 삼키면 유독함



건강에 위험

생식세포 변이원성 - 구분 2

H341 유전적인 결함을 일으킬 것으로 의심됨

특정표적장기 독성 - 반복 노출 - 구분 2 H373 장기간 또는 반복노출 되면 신체 중에 손상을 일으킬 수 있음



부식

금속부식성 물질 - 구분 1

H290 금속을 부식시킬 수 있음

심한 눈 손상성/눈 자극성 - 구분 1

H318 눈에 심한 손상을 일으킴



급성 독성 - 경피 - 구분 4

H312 피부와 접촉하면 유해함

(2 쪽에 계속)

물질안전보건자료 GHS에 따라

기압점: 2018.05.18

개정: 2018.05.18

제품명: VAN GIESON'S SOLUTION

(1 쪽부터계속)

피부 부식성/피부 자극성 - 구분 2 H315 피부에 자극을 일으킴

- 라벨표기 요소
- GHS 라벨 요소
- 그림문자



GHS05 GHS06 GHS08

- 신호어 위험
- 상표상에명확히위험성이표시된성분:

2,4,6-trinitrophenol

- 유해.위험 문구
- 금속을 부식시킬 수 있음
- 삼키면 유독함
- 피부와 접촉하면 유해함
- 피부에 자극을 일으킴
- 눈에 심한 손상을 일으킴
- 유전적인 결함을 일으킬 것으로 의심됨
- 장기간 또는 반복노출 되면 신체 중에 손상을 일으킬 수 있음

- 예방조치 문구
- 삼켰을 시: 즉시 독성물질센터/병원 연락 필요.
(라벨 참조) 처치를 하시오.
- 입을 씻어내시오.
- 눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하십시오. 계속 씻으시오.
- 오염된 의복은 벗고 다시 사용 전 세척하십시오.
- 잠금장치가 있는 저장장소에 저장 하시오.
- 현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

- 기타 유해성
- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

3 구성성분의 명칭 및 함유량

- 화학적 특성: 혼합물
- 설명: 무해한 첨가물이 함유된 아래에 열거된 물질로 만들어진 혼합물.

· 위험 요소:

88-89-1	2,4,6-trinitrophenol 폭발성 물질 - 등급 1.1, H201; 급성 독성 - 경구 - 구분 3, H301; 급성 독성 - 경피 - 구분 3, H311; 급성 독성 - 흡입 - 구분 3, H331	≤2.5%
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4 응급조치 요령

- 응급조치요령 내용
- 일반적 정보:
- 이 제품에 의해 오염된 의상은 즉시 제거한다.

(3 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2018.05.18

개정: 2018.05.18

제품명: VAN GIESON'S SOLUTION

(2 쪽부터계속)

중독 증상은 몇 시간이 지난 뒤에 발생할 수 있다. 따라서 사고가 발생한 후에 적어도 48 시간동안은 의료진의 관찰을 받아야 한다.

불규칙적인 호흡이나 호흡정지상태에서는 인공 호흡을 실시한다.

- **흡입했을 때:** 환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.
- **피부에 접촉했을 때:** 즉시 물과 비누로 씻고 잘 행군다.
- **눈에 들어갔을 때:** 흐르는 물에 눈을 몇분동안 씻어내고 나서, 의사와 상담한다
- **먹었을 때:** 구토를 유발시키지 않는다. 즉시 의료진의 도움을 구한다.
- **기타 의사의 주의사항:**
- **가장 중요한 급·만성 증상 및 영향** 추가적인 정보가 존재하지 않습니다.
- **즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다.

5 폭발·화재시 대처방법

- **소화제**
- **적절한 소화제:** 주변 환경에 맞는 화재 진화방법을 사용한다.
- **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.
- **소방관에 대한 권고사항**
- **화재 진압 시 착용할 보호구 및 예방조치:** 특별한 조치가 필요없음.

6 누출 사고 시 대처방법

- **개인적 예방조치, 보호장비 및 응급처치 절차** 필요없음.
- **환경 관련 예방조치:**
 많은 물로 희석 시킨다.
 하수도망/해수면위의물/지하수로도달하지않게한다.
- **밀폐 및 정화 방법과 소재:**
 액체가 혼합된 물질 (모래, 규조토, 산성 결합물, 일반 결합물, 톱밥)에 흡입되도록 한다.
 항목 13에 따라 오염된 물질을 쓰레기로 처분한다.
 충분한 환기가 되도록 한다.
- **타 섹션 참조**
 안전 관리에 대한 정보는 제7 장을 참고하십시오.
 개인 보호 장비에 대한 정보는 제8 장을 참고하십시오.
 쓰레기 처리에 대한 정보는 제13 장을 참고하십시오.

7 취급 및 저장방법

- **취급:**
- **안전 취급을 위한 예방조치**
 작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.
 연무질이 형성되는 것을 피한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:** 특별한 조치가 필요없음.
- **혼합 위험성 등 안전 저장 조건**
- **보관:**
- **안전한 저장 방법:** 특별한 요구사항이 없음.
- **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필요없음
- **보관 조건에 관한 추가적인 정보:** 없음
- **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

KR

(4 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2018.05.18

개정: 2018.05.18

제품명: VAN GIESON'S SOLUTION

(3 쪽부터계속)

8 노출방지 및 개인보호구

· **첨단시설 디자인에 대한 추가정보:** 더 이상 의 자료는 없음. 항 목 7 을 참고하시 오.

· **통제 변수**

· **화학물질의 노출기준, 생물학적 노출기준 등:**

88-89-1 2,4,6-trinitrophenol

TLV (KR)	단기간의값: 0.3 mg/m ³ 장기간의값: 0.1 mg/m ³ Skin
IOELV (EU)	장기간의값: 0.1 mg/m ³
PEL (US)	장기간의값: 0.1 mg/m ³ Skin
REL (US)	단기간의값: 0.3 mg/m ³ 장기간의값: 0.1 mg/m ³ Skin
TLV (US)	장기간의값: 0.1 mg/m ³

· **추 가 정보:** 제 조 할 당시에 유 효 한 목 록 을 기 초 로 사 용 했 다.

· **노출 통제**

· **개인 보호구**

· **일반적보호조치및위생조치:**

· 식료품, 음료수와 사료로부터 멀리 떨어져 두어 놓는다.

· 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.

· 휴식 전 이 나 작업이 끝날때마다 손을 씻는다.

· 피부와의 접촉을 피한다.

· 눈과 피부와의 접촉은 피한다.

· **호흡기 보호:**

· 단 시간 또는 경미한 오염의 경우에는 호흡여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.

· **손 보호:**



보호용 장갑

· 장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.

· 테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.

· 투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

· **장갑의재료**

· 적합한장갑의선택은재질차이뿐만아니라품질기준의차이도고려하여이루어져야하고제조업종에따라서도다르게선정되어야한다. 제품은다양한재료로부터의조제로이루어지는것이기때문에, 장갑재질의안정성은사전에예측되어질수있는것이아니고, 반드시사용전에 (그안전성이) 체크되어야한다.

· **장갑재료의투과시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

· **눈 보호:**



확조이는보안경

물질안전보건자료

GHS에 따라

기압점: 2018.05.18

개정: 2018.05.18

제품명: VAN GIESON'S SOLUTION

(4 쪽부터계속)

9 물리화학적 특성

· 기본 물리 및 화학적 특성에 대한 정보	
· 일반정보	
· 외형	
· 물리적 상태:	액체
· 색:	노르스름한경향의
· 냄새:	특색있는
· 후각역치	알맞지않다.
· pH:	알맞지않다.
· 상태변화	
· 녹는점/어는점:	맞지않는
· 초기 끓는점과 끓는점 범위:	맞지않는
· 인화점:	해당사항 없음.
· 인화성(고체, 기체):	해당사항 없음.
· 분해 온도:	알맞지않다.
· 자기점화:	이제품은자연발화성이없다.
· 폭발위험:	이제품은폭발위험성이없다
· 인화 또는 폭발 범위의 상한/하한	
· 아래로:	알맞지않다.
· 위로:	알맞지않다.
· 증기압 의경우 20 °C:	23 hPa
· 밀도:	맞지않는다.
· 비중:	알맞지않다.
· 증기밀도:	알맞지않다.
· 증발 속도:	알맞지않다.
· 용해도:	
· 물:	완전히혼합할수있는
· n 옥탄올/물 분배계수:	알맞지않다.
· 점도:	
· 역학성:	알맞지않다.
· 동점성:	알맞지않다.
· 용매내용물	
· 물:	98.4 %
· VOC (EU)	0.00 %
· 고체의 함량:	1.6 %
· 기타 정보	추가적인 정보가 존재하지 않습니다.

10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.

(6 쪽에계속)

물질안전보건자료 GHS에 따라

기압점: 2018.05.18

개정: 2018.05.18

제품명: VAN GIESON'S SOLUTION

(5 쪽부터계속)

- **혼합 금지 물질:** 추가적인 정보가 존재하지 않습니다.
- **유해분해물질:** 위험성있는분해물들은알려지지않았다.

11 독성에 관한 정보

- **독성학적 영향에 대한 정보**
- **급성 독성:**
- **일차적 자극 효과:**
- **피부 부식성 또는 자극성:** 피부와점막을자극한다.
- **심한 눈 손상 또는 자극성:** 심각한안구상처의위험이있는강한자극
- **감각화:** 민감한영향이없는것으로알려져있다.
- **추 가 적 인 독 성 에 관 한 정 보:**
이제품은유럽공동체의공동분류원칙의합법적인절차에근거하여최근에발효된원고에서아래위험들의사전 준비에대하여제시하고있다.
독성의
건강에해로운
자극적인
- **다음 종류의 잠재적인 효과에 대한 정보**
- **CMR-효과 (암 유발, 돌연변이성 그리고 생식 독성)**
생식세포 변이원성 - 구분 2

12 환경에 미치는 영향

- **독성**
- **수생독성:** 추가적인 정보가 존재하지 않습니다.
- **지속성 및 분해성** 추가적인 정보가 존재하지 않습니다.
- **환 경 시 스템 에 서 의 행 동:**
- **생물농축 잠재성** 추가적인 정보가 존재하지 않습니다.
- **토양내 이동성** 추가적인 정보가 존재하지 않습니다.
- **추가적인 생태학 정보:**
- **일반 특징:**
수질오염등급 1 (자체등급분류): 약하게수질오염이된
희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.
- **기타 부작용** 추가적인 정보가 존재하지 않습니다.

13 폐기시 주의사항

- **폐기물 처리 방법**
- **권고:** 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- **비위생적 포장:**
- **권고:** 당국의지침에입각한쓰레기처리.
- **추 천 세 정 제:** 경우에따라서세제가첨가된물

KR

(7 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2018.05.18

개정: 2018.05.18

제품명: VAN GIESON'S SOLUTION

(6 쪽부터계속)

14 운송에 필요한 정보

· 유엔 번호 · ADR, ADN, IMDG, IATA	누락되다
· UN 적정 선적명 · ADR, ADN, IMDG, IATA	누락되다
· 교통 위험 클래스 · ADR, ADN, IMDG, IATA · 등급	누락되다
· 용기등급 · ADR, IMDG, IATA	누락되다
· 환경적 유해물질:	해당사항 없음.
· 이용자 특별 예방조치	해당사항 없음.
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송	해당사항 없음.
· UN "모범 규제":	누락되다

15 법적 규제현황

· 산업안전보건법에 의한 규제:		
· 제조 등 금지물질: 어떠한내용물도목록화되어있지않다		
· 허가대상물질: 어떠한내용물도목록화되어있지않다		
· 관리대상유해물질: 어떠한내용물도목록화되어있지않다		
· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률		
· Korean Existing Chemical Inventory		
88-89-1	2,4,6-trinitrophenol	KE-34715
7732-18-5	Deionized Water, Reagent Grade A.C.S.	KE-35400
· 화학물질관리법		
· 사고대비물질 어떠한내용물도목록화되어있지않다		
· 금지물질 어떠한내용물도목록화되어있지않다		
· 제한물질 어떠한내용물도목록화되어있지않다		
· 유독물질		
88-89-1	2,4,6-trinitrophenol	
· 허가물질		
88-89-1	2,4,6-trinitrophenol	

(8 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2018.05.18

개정: 2018.05.18

제품명: VAN GIESON'S SOLUTION

(7 쪽부터계속)

- **GHS 라벨 요소**
본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- **그림문자**



GHS05 GHS06 GHS08

- **신호어 위험**
- **상표상에명확히위험성이표시된성분:**
2,4,6-trinitrophenol
- **유해.위험 문구**
금속을 부식시킬 수 있음
삼키면 유독함
피부와 접촉하면 유해함
피부에 자극을 일으킴
눈에 심한 손상을 일으킴
유전적인 결함을 일으킬 것으로 의심됨
장기간 또는 반복노출 되면 신체 중에 손상을 일으킬 수 있음
- **예방조치 문구**
삼켰을 시: 즉시 독성물질센터/병원 연락 필요.
(라벨 참조) 처치를 하시오.
입을 씻어내시오.
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하십시오. 계속 씻으시오.
오염된 의복은 벗고 다시 사용 전 세척하십시오.
잠금장치가 있는 저장장소에 저장하십시오.
현지/지역/국가/국제 규정에 따라서 내용물/용기 노출
- **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은 기술하지않았으며계약적인법률관계에기반을두고있지도않다

- **최초 작성일자:** 2018.05.18
- **개정 횟수 및 최종 개정일자:** 1 / 2018.05.18
- **약어와 두문자어:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 18.05.2018

Revisión: 18.05.2018

SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

· 1.1 Identificador del producto

· **Nombre comercial:** VAN GIESON'S SOLUTION

· **Número del artículo:** 26370-02, 26350-01, 26392-5A, 26611-02, 26369-05

· **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**

No existen más datos relevantes disponibles.

· **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio

· 1.3 Datos del proveedor de la ficha de datos de seguridad

· **Fabricante/distribuidor:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

Aname

C/ Perez Galdos no. 2

28693 Quijorna

Madrid, Spain

Tel: +34.91.816.89.50

Fax: +34.91.816.85.94

email: ventas@aname.es

· **Área de información:** Product safety department

· **1.4 Teléfono de emergencia:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

SECCIÓN 2: Identificación de los peligros

· **2.1 Clasificación de la sustancia o de la mezcla**

· **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS06 calavera y tibias cruzadas

Acute Tox. 3 H301 Tóxico en caso de ingestión.



GHS08 peligro para la salud

Muta. 2 H341 Se sospecha que provoca defectos genéticos.

STOT RE 2 H373 Puede provocar daños en los órganos tras exposiciones prolongadas o repetidas.



GHS05 corrosión

Met. Corr.1 H290 Puede ser corrosivo para los metales.

Eye Dam. 1 H318 Provoca lesiones oculares graves.



GHS07

(se continua en página 2)

Ficha de datos de seguridad según 1907/2006/CE, Artículo 31

fecha de impresión 18.05.2018

Revisión: 18.05.2018

Nombre comercial: VAN GIESON'S SOLUTION

(se continua en página 1)

Acute Tox. 4 H312 Nocivo en contacto con la piel.

Skin Irrit. 2 H315 Provoca irritación cutánea.

· **2.2 Elementos de la etiqueta**

· **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**

El producto se ha clasificado y etiquetado de conformidad con el reglamento CLP.

· **Pictogramas de peligro**



GHS05 GHS06 GHS08

· **Palabra de advertencia Peligro**

· **Componentes peligrosos a indicar en el etiquetaje:**

2,4,6-trinitrofenol

· **Indicaciones de peligro**

H290 Puede ser corrosivo para los metales.

H301 Tóxico en caso de ingestión.

H312 Nocivo en contacto con la piel.

H315 Provoca irritación cutánea.

H318 Provoca lesiones oculares graves.

H341 Se sospecha que provoca defectos genéticos.

H373 Puede provocar daños en los órganos tras exposiciones prolongadas o repetidas.

· **Consejos de prudencia**

P301+P310 **EN CASO DE INGESTIÓN:** Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/médico.

P321 Se necesita un tratamiento específico (ver en esta etiqueta).

P330 Enjuagarse la boca.

P305+P351+P338 **EN CASO DE CONTACTO CON LOS OJOS:** Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.

P362+P364 Quitar las prendas contaminadas y lavarlas antes de volver a usarlas.

P405 Guardar bajo llave.

P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.

· **2.3 Otros peligros**

· **Resultados de la valoración PBT y mPmB**

· **PBT:** No aplicable.

· **mPmB:** No aplicable.

SECCIÓN 3: Composición/información sobre los componentes

· **3.2 Caracterización química: Mezclas**

· **Descripción:** Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.

· **Componentes peligrosos:**

CAS: 88-89-1	2,4,6-trinitrofenol	≤2,5%
EINECS: 201-865-9	Explos. 1.1, H201; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	

· **Indicaciones adicionales:** El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

ES

(se continua en página 3)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 18.05.2018

Revisión: 18.05.2018

Nombre comercial: VAN GIESON'S SOLUTION

(se continua en página 2)

SECCIÓN 4: Primeros auxilios

· 4.1 Descripción de los primeros auxilios

· Instrucciones generales:

Quitarse de inmediato toda prenda contaminada con el producto.

Los síntomas de intoxicación pueden presentarse después de muchas horas, por lo que se requiere una supervisión médica durante un mínimo de 48 horas después del accidente.

En caso de respiración irregular o apnea (paro respiratorio), hágase la respiración artificial.

· En caso de inhalación del producto:

Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.

· En caso de contacto con la piel: Lavar inmediatamente con agua y jabón y enjuagar bien.

· En caso de con los ojos:

Limpia los ojos abiertos durante varios minutos con agua corriente y consultar un médico.

· En caso de ingestión: No provocar el vómito y solicitar asistencia médica inmediata.

· 4.2 Principales síntomas y efectos, agudos y retardados No existen más datos relevantes disponibles.

· 4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente

No existen más datos relevantes disponibles.

SECCIÓN 5: Medidas de lucha contra incendios

· 5.1 Medios de extinción

· Sustancias extintoras apropiadas: Combatir los incendios con medidas adaptados al ambiente circundante.

· 5.2 Peligros específicos derivados de la sustancia o la mezcla No existen más datos relevantes disponibles.

· 5.3 Recomendaciones para el personal de lucha contra incendios

· Equipo especial de protección: No se requieren medidas especiales.

SECCIÓN 6: Medidas en caso de vertido accidental

· 6.1 Precauciones personales, equipo de protección y procedimientos de emergencia No es necesario.

· 6.2 Precauciones relativas al medio ambiente:

Diluir con mucha agua.

Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.

· 6.3 Métodos y material de contención y de limpieza:

Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).

Desechar el material contaminado como vertido según ítem 13.

Asegurar suficiente ventilación.

· 6.4 Referencia a otras secciones

Ver capítulo 7 para mayor información sobre una manipulación segura.

Ver capítulo 8 para mayor información sobre el equipo personal de protección.

Para mayor información sobre cómo desechar el producto, ver capítulo 13.

SECCIÓN 7: Manipulación y almacenamiento

· 7.1 Precauciones para una manipulación segura

Asegurar suficiente ventilación /aspiración en el puesto de trabajo.

Evitar la formación de aerosoles.

· Prevención de incendios y explosiones: No se requieren medidas especiales.

· 7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades

· Almacenamiento:

· Exigencias con respecto al almacén y los recipientes: No se requieren medidas especiales.

· Normas en caso de un almacenamiento conjunto: No es necesario.

(se continua en página 4)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 18.05.2018

Revisión: 18.05.2018

Nombre comercial: VAN GIESON'S SOLUTION

(se continua en página 3)

- **Indicaciones adicionales sobre las condiciones de almacenamiento:** Ningunos, -as.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

SECCIÓN 8: Controles de exposición/protección individual

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**
Sin datos adicionales, ver punto 7.

· 8.1 Parámetros de control

- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**

88-89-1 2,4,6-trinitrofenol

LEP	Valor de larga duración: 0,1 mg/m ³
VLI	

- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.

· 8.2 Controles de la exposición

· Equipo de protección individual:

· Medidas generales de protección e higiene:

Mantener alejado de alimentos, bebidas y alimentos para animales.

Quitarse de inmediato la ropa ensuciada o impregnada.

Lavarse las manos antes de las pausas y al final del trabajo.

Evitar el contacto con la piel.

Evitar el contacto con los ojos y la piel.

· Protección respiratoria:

Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.

· Protección de manos:



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

· Material de los guantes

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.

· Tiempo de penetración del material de los guantes

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

· Protección de ojos:



Gafas de protección herméticas

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(se continua en página 5)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 18.05.2018

Revisión: 18.05.2018

Nombre comercial: VAN GIESON'S SOLUTION

(se continua en página 4)

SECCIÓN 9: Propiedades físicas y químicas

· 9.1 Información sobre propiedades físicas y químicas básicas

· Datos generales

· Aspecto:

Forma:

Líquido

Color:

Con matiz amarillo

· Olor:

Característico

· Umbral olfativo:

No determinado.

· valor pH:

No determinado.

· Cambio de estado

Punto de fusión/punto de congelación:

Indeterminado.

Punto inicial de ebullición e intervalo de ebullición: Indeterminado.

· Punto de inflamación:

No aplicable.

· Inflamabilidad (sólido, gas):

No aplicable.

· Temperatura de descomposición:

No determinado.

· Temperatura de auto-inflamación:

El producto no es autoinflamable.

· Propiedades explosivas:

El producto no es explosivo.

· Límites de explosión:

Inferior:

No determinado.

Superior:

No determinado.

· Presión de vapor a 20 °C:

23 hPa

· Densidad:

Indeterminado.

· Densidad relativa

No determinado.

· Densidad de vapor

No determinado.

· Tasa de evaporación:

No determinado.

· Solubilidad en / miscibilidad con agua:

Completamente mezclable.

· Coeficiente de reparto: n-octanol/agua:

No determinado.

· Viscosidad:

Dinámica:

No determinado.

Cinemática:

No determinado.

· Concentración del disolvente:

Agua:

98,4 %

VOC (CE)

0,00 %

Contenido de cuerpos sólidos:

1,6 %

· 9.2 Otros datos

No existen más datos relevantes disponibles.

SECCIÓN 10: Estabilidad y reactividad

· 10.1 Reactividad No existen más datos relevantes disponibles.

· 10.2 Estabilidad química

· Descomposición térmica / condiciones que deben evitarse: No se descompone al emplearse adecuadamente.

· 10.3 Posibilidad de reacciones peligrosas No se conocen reacciones peligrosas.

· 10.4 Condiciones que deben evitarse No existen más datos relevantes disponibles.

(se continua en página 6)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 18.05.2018

Revisión: 18.05.2018

Nombre comercial: VAN GIESON'S SOLUTION

(se continua en página 5)

- **10.5 Materiales incompatibles:** No existen más datos relevantes disponibles.
- **10.6 Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda**
Tóxico en caso de ingestión.
Nocivo en contacto con la piel.
- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas**
Provoca irritación cutánea.
- **Lesiones o irritación ocular graves**
Provoca lesiones oculares graves.
- **Sensibilización respiratoria o cutánea**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)**
- **Mutagenicidad en células germinales**
Se sospecha que provoca defectos genéticos.
- **Carcinogenicidad** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad para la reproducción** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición única**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición repetida**
Puede provocar daños en los órganos tras exposiciones prolongadas o repetidas.
- **Peligro de aspiración** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

SECCIÓN 12: Información ecológica

- **12.1 Toxicidad**
- **Toxicidad acuática:** No existen más datos relevantes disponibles.
- **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.
- **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.
- **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**
Nivel de riesgo para el agua 1 (autoclasiificación): escasamente peligroso para el agua
En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.
- **12.5 Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.
- **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

SECCIÓN 13: Consideraciones relativas a la eliminación

- **13.1 Métodos para el tratamiento de residuos**
- **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.

(se continua en página 7)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 18.05.2018

Revisión: 18.05.2018

Nombre comercial: VAN GIESON'S SOLUTION

(se continua en página 6)

· **Producto de limpieza recomendado:** Agua, eventualmente añadiendo productos de limpieza.

SECCIÓN 14: Información relativa al transporte

- | | |
|-------------------------------------------------------------------------------------------|---------------|
| · 14.1 Número ONU
· ADR, ADN, IMDG, IATA | suprimido |
| · 14.2 Designación oficial de transporte de las Naciones Unidas
· ADR, ADN, IMDG, IATA | suprimido |
| · 14.3 Clase(s) de peligro para el transporte
· ADR, ADN, IMDG, IATA
· Clase | suprimido |
| · 14.4 Grupo de embalaje
· ADR, IMDG, IATA | suprimido |
| · 14.5 Peligros para el medio ambiente: | No aplicable. |
| · 14.6 Precauciones particulares para los usuarios | No aplicable. |
| · 14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC | No aplicable. |
| · "Reglamentación Modelo" de la UNECE: | suprimido |

SECCIÓN 15: Información reglamentaria

- 15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla
- Directiva 2012/18/UE
- Sustancias peligrosas nominadas - ANEXO I ninguno de los componentes está incluido en una lista
- REGLAMENTO (CE) n° 1907/2006 ANEXO XVII Restricciones: 3
- 15.2 Evaluación de la seguridad química: Una evaluación de la seguridad química no se ha llevado a cabo.

SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

· **Frasas relevantes**

- H201 Explosivo; peligro de explosión en masa.
- H301 Tóxico en caso de ingestión.
- H311 Tóxico en contacto con la piel.
- H331 Tóxico en caso de inhalación.

· **Abreviaturas y acrónimos:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- PBT: Persistent, Bioaccumulative and Toxic

(se continua en página 8)

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 18.05.2018

Revisión: 18.05.2018

Nombre comercial: VAN GIESON'S SOLUTION

(se continua en página 7)

*vPvB: very Persistent and very Bioaccumulative**Expl. 1.1: Explosivos – División 1.1**Met. Corr.1: Corrosivos para los metales – Categoría 1**Acute Tox. 3: Toxicidad aguda – Categoría 3**Acute Tox. 4: Toxicidad aguda – Categoría 4**Skin Irrit. 2: Corrosión o irritación cutáneas – Categoría 2**Eye Dam. 1: Lesiones oculares graves o irritación ocular – Categoría 1**Muta. 2: Mutagenicidad en células germinales – Categoría 2**STOT RE 2: Toxicidad específica en determinados órganos (exposiciones repetidas) – Categoría 2*

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