

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Switzerland

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

1.1 Product identifier

| | | |
|-------------------------------|--|---|
| Product name | Reagent A (Enhancer); part of 'IntenSE™ M Silver Enhancement Kit' | |
| Catalogue Number | RPN491 |  9 0 R P N 4 9 1 |
| Component Number | RPN491V2 | |
| Product description | Not available. | |
| Product type | Liquid. | |
| Other means of identification | Not available. | |

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Use in laboratories

1.3 Details of the supplier of the safety data sheet

| | | |
|--|--|--|
| Supplier | GE Healthcare UK Ltd Amersham Place Little Chalfont Buckinghamshire HP7 9NA England +44 0870 606 1921 | Hours of operation 08.30 - 17.00 |
| Person who prepared the MSDS: msdslifesciences@ge.com | | |

| | | |
|--------------------|---|---|
| Switzerland | GE Healthcare Europe GmbH Europastrasse 31 CH-8152 Glattbrugg | 1.4 Emergency telephone number 0848 8028 10 |
|--------------------|---|---|

National advisory body/Poison Centre

| | |
|--------------------|---|
| Switzerland | Centre Suisse d'Information Toxicologique (Swiss Toxicological Information Centre) Freiestrasse 16 CH-8032 Zurich Telephone: +41 44 251 66 66 Emergency telephone: +41 44 251 51 51 (145 from within Switzerland and Liechtenstein) Fax: +41 44 252 88 33 E-mail: info@toxi.ch Web site: http://www.toxi.ch |
|--------------------|---|



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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Corr. 1B, H314
Eye Dam. 1, H318
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 6.9%

Ingredients of unknown ecotoxicity Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 14.9%

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification Xi; R36/38
N; R50/53

Human health hazards Irritating to eyes and skin.

Environmental hazards Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



Signal word Danger

Hazard statements Causes severe skin burns and eye damage.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid release to the environment.

Response IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. IF IN EYES: Immediately call a POISON CENTER or physician.

Storage Store locked up.

Disposal Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients imidazole

Supplemental label elements Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings Not applicable.

Tactile warning of danger Not applicable.

2.3 Other hazards

Other hazards which do not result in classification None known.



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SECTION 3: Composition/information on ingredients

Substance/mixture

Mixture

| Product/ingredient name | Identifiers | % | Classification | | Type |
|-------------------------|---|------|---|---|---------|
| | | | 67/548/EEC | Regulation (EC) No. 1272/2008 [CLP] | |
| imidazole | REACH #: 01-2119485825-24 EC: 206-019-2 CAS: 288-32-4 | 8 | Xn; R22 C; R34 | Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 | [1] |
| silver nitrate | REACH #: 01-2119513705-43 EC: 231-853-9 CAS: 7761-88-8 Index: 047-001-00-2 | <0.5 | O; R8 C; R34 N; R50/53 See Section 16 for the full text of the R-phrases declared above. | Ox. Sol. 2, H272 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above. | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact

Causes serious eye damage.

Inhalation

May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact

Causes severe burns.



| | |
|-------------------------------------|--|
| Ingestion | May cause burns to mouth, throat and stomach. |
| <u>Over-exposure signs/symptoms</u> | |
| Eye contact | Adverse symptoms may include the following: pain watering redness |
| Inhalation | No specific data. |
| Skin contact | Adverse symptoms may include the following: pain or irritation redness blistering may occur |
| Ingestion | Adverse symptoms may include the following: stomach pains |

4.3 Indication of any immediate medical attention and special treatment needed

| | |
|----------------------------|---|
| Notes to physician | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Specific treatments | No specific treatment. |

SECTION 5: Firefighting measures

5.1 Extinguishing media

| | |
|---------------------------------------|---|
| Suitable extinguishing media | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | None known. |

5.2 Special hazards arising from the substance or mixture

| | |
|--|---|
| Hazards from the substance or mixture | In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Hazardous combustion products | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides |

5.3 Advice for firefighters

| | |
|---|---|
| Special precautions for fire-fighters | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

| | |
|------------------------------------|--|
| For non-emergency personnel | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| For emergency responders | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |

| | |
|--------------------------------------|--|
| 6.2 Environmental precautions | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. |
|--------------------------------------|--|

6.3 Methods and materials for containment and cleaning up

| | |
|--------------------|---|
| Small spill | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| Large spill | Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. |

| | |
|--|---|
| 6.4 Reference to other sections | See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information. |
|--|---|



SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Seveso II Directive - Reporting thresholds (in tonnes)

Danger criteria

| Category | Notification and MAPP threshold | Safety report threshold |
|-------------------------------------|---------------------------------|-------------------------|
| C9i: Very toxic for the environment | 100 | 200 |

7.3 Specific end use(s)

Recommendations

Research and Development Analytical reagent. Analytical chemistry.

Industrial sector specific solutions

Not available.

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|--|
| silver nitrate | SUVA (Switzerland, 1/2012). TWA: 0.01 mg/m ³ , (calculated as Ag) 8 hours. Form: inhalable fraction STEL: 0.02 mg/m ³ , (calculated as Ag) 15 minutes. Form: inhalable fraction |

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DELs available.

PNECs

No PECs available.

8.2 Exposure controls

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.



| | |
|--|--|
| Eye/face protection | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. |
| Skin protection | |
| Hand protection | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| Body protection | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection | Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |
| Environmental exposure controls | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|---|--|
| Physical state | Liquid. |
| Colour | Colourless. |
| Odour | Not available. |
| Odour threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | [Product does not sustain combustion.] |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture. |
| Burning time | Not applicable. |
| Burning rate | Not applicable. |
| Upper/lower flammability or explosive limits | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | Easily soluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/water | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Explosive properties | Not considered to be a product presenting a risk of explosion. |
| Oxidising properties | Not available. |

9.2 Other information

No additional information.



SECTION 10: Stability and reactivity

| | |
|--|--|
| 10.1 Reactivity | No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | The product is stable. |
| 10.3 Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | No specific data. |
| 10.5 Incompatible materials | No specific data. |
| 10.6 Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------|---------|------------|----------|
| imidazole | LD50 Oral | Rat | 220 mg/kg | - |
| silver nitrate | LD50 Oral | Rat | 1173 mg/kg | - |

Conclusion/Summary Not available.

Acute toxicity estimates

| Route | ATE value |
|-------|------------|
| Oral | 6250 mg/kg |

Irritation/Corrosion

Conclusion/Summary Not available.

Sensitisation

Conclusion/Summary Not available.

Mutagenicity

Conclusion/Summary Not available.

Carcinogenicity

Conclusion/Summary Not available.

Reproductive toxicity

Conclusion/Summary Not available.

Teratogenicity

Conclusion/Summary Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

| | |
|---------------------|--|
| Inhalation | May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| Ingestion | May cause burns to mouth, throat and stomach. |
| Skin contact | Causes severe burns. |
| Eye contact | Causes serious eye damage. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-------------------|--|
| Inhalation | No specific data. |
| Ingestion | Adverse symptoms may include the following: stomach pains |



| | |
|---------------------|--|
| Skin contact | Adverse symptoms may include the following: pain or irritation redness blistering may occur |
| Eye contact | Adverse symptoms may include the following: pain watering redness |

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

Not available.

Conclusion/Summary Not available.

General No known significant effects or critical hazards.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Other information Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|---|---|--|
| silver nitrate | Acute EC50 0.0026 ppm Fresh water Acute EC50 2 ng/L Marine water Acute LC50 0.18 µg/l Fresh water Acute LC50 0.3 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata Crustaceans - Acartia tonsa - Adult Daphnia - Daphnia magna - Neonate Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours 48 hours 48 hours 96 hours |
| | Chronic IC10 2 µg/l Fresh water Chronic NOEC 0.9 µg/l Fresh water Chronic NOEC 1.49 µg/l Fresh water Chronic NOEC 0.005 µg/l Fresh water | Algae - Staurastrum cristatum Crustaceans - Hyalella azteca - Adult Daphnia - Daphnia magna Fish - Oncorhynchus mykiss - Embryo | 4 days 21 days 21 days 34.06 days |

Conclusion/Summary Not available.

12.2 Persistence and degradability

Conclusion/Summary Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| imidazole | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| imidazole | -0.08 | - | low |
| silver nitrate | - | 200 | low |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) Not available.
)

Mobility Not available.

12.5 Results of PBT and vPvB assessment

PBT Not applicable.



VPVB Not applicable.

12.6 Other adverse effects No known significant effects or critical hazards.**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods**Product****Methods of disposal**

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

The classification of the product may meet the criteria for a hazardous waste.





Packaging**Methods of disposal**

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|--|--|--|---|--|
| 14.1 UN number | UN3082 | UN3082 | UN3082 | UN3082 |
| 14.2 UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (silver nitrate, solution) | Environmentally hazardous substance, liquid, n.o.s. (silver nitrate, solution) | Environmentally hazardous substance, liquid, n.o.s. (silver nitrate, solution) | Environmentally hazardous substance, liquid, n.o.s. (silver nitrate, solution) |
| 14.3 Transport hazard class(es) | 9  | 9  | 9  | 9  |
| 14.4 Packing group | III | III | III | III |
| 14.5 Environmental hazards | No. | No. | No. | No. |
| Additional information | <u>Tunnel code</u> (E) | - | - | - |

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulation (EC) No. 1907/2006 (REACH)****Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

Substances of very high concern

None of the components are listed.



Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

Europe inventory All components are listed or exempted.
Black List Chemicals Not listed
Priority List Chemicals Not listed
Integrated pollution prevention and control list (IPPC) - Air Not listed

Integrated pollution prevention and control list (IPPC) - Water Not listed

Seveso II Directive

This product is not controlled under the Seveso II Directive.

Danger criteria

Category

C9: Very toxic for the environment

National regulations

VOC content Liberated.
Chemical Weapons Convention List Schedule I Chemicals Not listed

Chemical Weapons Convention List Schedule II Chemicals Not listed

Chemical Weapons Convention List Schedule III Chemicals Not listed

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|--|---|
| Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412 | Calculation method Calculation method Expert judgment |

Full text of abbreviated H statements

H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4
Aquatic Acute 1, H400 ACUTE AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410 LONG-TERM AQUATIC HAZARD - Category 1
Aquatic Chronic 3, H412 LONG-TERM AQUATIC HAZARD - Category 3
Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Ox. Sol. 2, H272 OXIDIZING SOLIDS - Category 2
Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B



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| | |
|---|---|
| Full text of abbreviated R phrases | R8- Contact with combustible material may cause fire. R22- Harmful if swallowed. R34- Causes burns. R36/38- Irritating to eyes and skin. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| Full text of classifications [DSD/DPD] | O - Oxidising C - Corrosive Xn - Harmful Xi - Irritant N - Dangerous for the environment |
| Date of printing | 07 May 2014 |
| Date of issue/ Date of revision | 07 May 2014 |
| Date of previous issue | No previous validation |
| Version | 3 |

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



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