SAFETY DATA SHEET
Bismuth Internal Standard Stock Solution, Part Number 8500-6936

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

1.1 Product identifier
Product name: Bismuth Internal Standard Stock Solution, Part Number 8500-6936
Part no.: 8500-6936

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Reagents and Standards for Analytical Chemistry Laboratory Use
A 100 ml. preparation
Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet
Agilent Technologies Deutschland GmbH
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000
e-mail address of person responsible for this SDS: pdl-msds_author@agilent.com

1.4 Emergency telephone number
Emergency telephone number (with hours of operation): CHEMTREC®: +(44)-870-8200418

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]
H290 - CORROSIVE TO METALS
H315 - SKIN CORROSION/IRRITATION
H319 - SERIOUS EYE DAMAGE/EYE IRRITATION

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
See Section 16 for the full text of the H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements
Hazard pictograms:

Signal word: Warning
Hazard statements:
H290 - May be corrosive to metals.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements:
Prevention:
P280 - Wear protective gloves. Wear eye or face protection.
P234 - Keep only in original packaging.
P264 - Wash thoroughly after handling.
SECTION 2: Hazards identification

Response: P390 - Absorb spillage to prevent material damage.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P302 + P352 - IF ON SKIN: Wash with plenty of water.

Storage: Not applicable.

Disposal: Not applicable.

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.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures: Mixture

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Classification</th>
<th>Specific Conc. Limits, M-factors and ATEs</th>
<th>Type</th>
</tr>
</thead>
</table>

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

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, vPvBs or Substances of equivalent concern, 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

Occupational exposure limits, if available, are listed in Section 8.
SECTION 4: First aid measures

4.1 Description of first aid measures

**Eye contact**

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. Get medical attention.

**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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**

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. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**

Wash out mouth with water. Remove dentures if any. 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. Get medical attention if adverse health effects persist or are severe. 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

**Potential acute health effects**

- **Eye contact**: Causes serious eye irritation.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: Causes skin irritation.
- **Ingestion**: No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

- **Eye contact**: Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness

- **Inhalation**: No specific data.

- **Skin contact**: Adverse symptoms may include the following:
  - irritation
  - redness

- **Ingestion**: No specific data.

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.

Hazardous combustion products: Decomposition products may include the following materials: nitrogen 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. Avoid breathing 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).

6.3 Methods and material for containment and cleaning up
Methods for cleaning up: Stop leak if without risk. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Move containers from spill area. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

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

7.1 Precautions for safe handling
Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.
SECTION 7: Handling and storage

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

Storage: 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 in corrosive resistant container with a resistant inner liner. Separate from alkalis. Keep away from metals. 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. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations: Industrial applications, Professional applications.

Industrial sector specific solutions: Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>nitric acid ([C \leq 70%])</td>
<td>NAOSH (Ireland, 5/2021). Notes: EU derived Occupational Exposure Limit Values OELV-15min: 1 ppm 15 minutes. OELV-15min: 2.6 mg/m³ 15 minutes.</td>
</tr>
</tbody>
</table>

Biological exposure indices

None known.

Recommended monitoring procedures: 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 DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures
### SECTION 8: Exposure controls/personal protection

**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.

**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**: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### 9.1 Information on basic physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless to light yellow.</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>0°C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100°C</td>
</tr>
</tbody>
</table>

**Flammability**: Not applicable.

**Upper/lower flammability or explosive limits**: Not available.

**Flash point**: Not available.

**Auto-ignition temperature**: Not available.

**Decomposition temperature**: Not available.

**pH**: <2

**Viscosity**: Not available.
SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Solubility(ies)</th>
<th>Media</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td></td>
<td>Soluble</td>
</tr>
</tbody>
</table>

Miscible with water: Yes.
Partition coefficient: n-octanol/water: Not applicable.

Vapour pressure:

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Vapour Pressure at 20°C mm Hg</th>
<th>kPa</th>
<th>Method</th>
<th>Vapour Pressure at 50°C mm Hg</th>
<th>kPa</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>nitric acid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaporation rate: Not available.
Relative density: Not available.
Vapour density: Not available.
Explosive properties: Not available.
Oxidising properties: Not available.
Particle characteristics:
Median particle size: Not applicable.

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: Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Reactive or incompatible with the following materials: alkalis metals

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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>nitric acid [C ≤ 70%]</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>2500 ppm</td>
<td>1 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>130 mg/m³</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

Acute toxicity estimates
SECTION 11: Toxicological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapours) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bismuth Internal Standard Stock Solution, Part Number 8500-6936 nitric acid [C ≤ 70%]</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>132.5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**
- **Conclusion/Summary**: Not available.

**Sensitiser**
- **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 likely routes of exposure**
- Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

**Potential acute health effects**
- **Inhalation**: No known significant effects or critical hazards.
- **Ingestion**: No known significant effects or critical hazards.
- **Skin contact**: Causes skin irritation.
- **Eye contact**: Causes serious eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics**
- **Inhalation**: No specific data.
- **Ingestion**: No specific data.
- **Skin contact**: Adverse symptoms may include the following:
  - irritation
  - redness
- **Eye contact**: Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Short term exposure**
- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

**Long term exposure**
SECTION 11: Toxicological information

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Potential chronic health effects
General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Reproductive toxicity: No known significant effects or critical hazards.

11.2 Information on other hazards
11.2.1 Endocrine disrupting properties
Not available.
11.2.2 Other information
Not available.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>nitric acid [C ≤ 70%]</td>
<td>Acute LC50 180000 μg/l Marine water</td>
<td>Crustaceans - Carcinus maenas - Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 72 ppm Fresh water</td>
<td>Fish - Gambusia affinis - Adult</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability
Not available.

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>nitric acid [C ≤ 70%]</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>nitric acid [C ≤ 70%]</td>
<td>-0.21</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil
Soil/water partition coefficient (K_{oc}): Not available.
Mobility: Not available.

12.5 Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties
Not available.

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

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

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 spill material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

<table>
<thead>
<tr>
<th>14.1 UN number or ID number</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UN3264</td>
<td>UN3264</td>
<td>UN3264</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.2 UN proper shipping name</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid, solution)</td>
<td>UN3264</td>
<td>UN3264</td>
<td>UN3264</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.3 Transport hazard class(es)</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
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<td>8</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>14.4 Packing group</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>III</td>
<td>III</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.5 Environmental hazards</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td></td>
</tr>
</tbody>
</table>

**Additional information**

**ADR/RID:**
- **Hazard identification number** 80
- **Limited quantity** 5 L
- **Special provisions** 274
- **Tunnel code** (E)

**IMDG:**
- **Emergency schedules** F-A, S-B
- **Special provisions** 223, 274

**IATA:**
- **Special provisions** A3, A803
- **Remarks** Requires Shipper's Declaration of Dangerous Goods

**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.
SECTION 14: Transport information

14.7 Transport in bulk according to IMO instruments: 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 listed.

**Label:** Not applicable.

**Other EU regulations**

**Ozone depleting substances (1005/2009/EU)**
Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**
Not listed.

**Persistent Organic Pollutants**
Not listed.

**Seveso Directive**
This product is not controlled under the Seveso Directive.

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**
Not listed.

**Montreal Protocol**
Not listed.

**Stockholm Convention on Persistent Organic Pollutants**
Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**
Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**
Not listed.

**Inventory list**

**Australia** : All components are listed or exempted.

**Canada** : All components are listed or exempted.

**China** : All components are listed or exempted.

**Eurasian Economic Union** : **Russian Federation inventory**: All components are listed or exempted.

**Japan** : **Japan inventory (CSCL)**: All components are listed or exempted. **Japan inventory (ISHL)**: All components are listed or exempted.

**New Zealand** : All components are listed or exempted.

**Philippines** : All components are listed or exempted.
SECTION 15: Regulatory information

<table>
<thead>
<tr>
<th>Country</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republic of Korea</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Taiwan</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Thailand</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Not determined.</td>
</tr>
<tr>
<td>United States</td>
<td>All components are active or exempted.</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>All components are listed or exempted.</td>
</tr>
</tbody>
</table>

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments might still be 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]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRR = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>Eye Irrit. 2, H319</td>
<td>Expert judgment</td>
</tr>
</tbody>
</table>

Full text of abbreviated H statements

- H272: May intensify fire; oxidiser.
- H290: May be corrosive to metals.
- H314: Causes severe skin burns and eye damage.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H331: Toxic if inhaled.
- EUH071: Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

- Acute Tox. 3: ACUTE TOXICITY - Category 3
- Eye Irrit. 2: SERIOUS EYE DAMAGE/EYE IRRIGATION - Category 2
- Met. Corr. 1: CORROSIVE TO METALS - Category 1
- Ox. Liq. 3: OXIDISING LIQUIDS - Category 3
- Skin Corr. 1A: SKIN CORROSION/IRRITATION - Category 1A
- Skin Irrit. 2: SKIN CORROSION/IRRITATION - Category 2

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