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

1.1 Product identifier
Product name: OLYMPUS ENDODIS
Product code: 107642E
Product use: Instrument Disinfectant
Product is for professional use only

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

<table>
<thead>
<tr>
<th>Identified uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical devices . Semi-automatic process</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Uses advised against</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known.</td>
</tr>
</tbody>
</table>

1.3 Details of the supplier of the safety data sheet

1.4 Emergency telephone number
National advisory body/Poison Centre
Manufacturer/ Distributor/ Importer

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
STOT SE 3, H335

The classification of this product is based on toxicological assessment.

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

Classification:
Xn; R22
C; R34
Xi; R37

The classification of this product is based on toxicological assessment.

Human health hazards: Harmful if swallowed. Causes burns. Irritating to respiratory system.

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: ![Hazard pictograms]

Signal word: Danger
Contains: Hydrogenperoxide
Peracetic acid

Hazard statements:
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Date of issue/Date of revision: 27 August 2013
SECTION 2: Hazards identification

Precautionary statements

Prevention: P280 - Wear protective gloves and eye/face protection.

Response: P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.

2.3 Other hazards

Other hazards which do not result in classification: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Classification</th>
<th>Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogenperoxide</td>
<td>REACH #: 01-2119485845-22 EC: 231-765-0 CAS: 7722-84-1 Index: 008-003-00-9</td>
<td>8 - &lt;35</td>
<td>O; R8 R5 Xn; R20/22 C; R35</td>
<td>Ox. Liq. 1, H271 Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1A, H314 STOT SE 3, H335</td>
<td>[1]</td>
</tr>
</tbody>
</table>

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 and hence require reporting in this section.

Type
[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[5] Substance of equivalent concern

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

Date of issue/Date of revision: 27 August 2013
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 15 minutes. Chemical burns must be treated promptly by a physician. Get medical attention immediately. Call a poison center or physician.

**Inhalation**: 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. 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. Get medical attention immediately. Call a poison center or physician.

**Skin contact**: Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Chemical burns must be treated promptly by a physician. Wash contaminated clothing before reusing. Clean shoes thoroughly before reuse. Get medical attention immediately. Call a poison center or physician.

**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. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately. Call a poison center or physician.

**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. 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 cause respiratory irritation.
- **Skin contact**: Causes severe burns.
- **Ingestion**: May cause burns to mouth, throat and stomach.

**Over-exposure signs/symptoms**

- **Eye contact**: Adverse symptoms may include the following:
  - pain
  - watering
  - redness
- **Inhalation**: Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
- **Skin contact**: Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur
- **Ingestion**: Adverse symptoms may include the following:

Date of issue/Date of revision: 27 August 2013
SECTION 4: First aid measures

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: In case of fire, use water spray (fog), foam, dry chemical, or CO₂.

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:
- Carbon dioxide
- Carbon monoxide

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.

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. Keep unnecessary and unprotected personnel from entering. Try to avoid touching or walking through spill 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 spill 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 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.

Date of issue/Date of revision: 27 August 2013
SECTION 6: Accidental release measures

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. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

Advice on general occupational hygiene

Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 25°C (32 to 77°F). 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. Separate from alkalis. 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.

7.3 Specific end use(s)

Recommendations

Not applicable until Exposure Scenarios for substances become available.

Industrial sector specific solutions

Not applicable until Exposure Scenarios for substances become 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>Acetic acid</td>
<td>EU OEL (Europe, 12/2009). TWA: 25 mg/m³ 8 hours. TWA: 10 ppm 8 hours.</td>
</tr>
</tbody>
</table>

Derived effect levels

No DNELs available for the mixture.

Predicted effect concentrations

No PNECs available for the mixture.

Date of issue/Date of revision: 27 August 2013
SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

Appropriate engineering controls: Use only with adequate ventilation. 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 (EN 166): Highly recommended: Goggles, face shield, or other full-face protection.

Skin protection

Hand protection (EN 374): Highly recommended: Gloves - butyl rubber, nitrile rubber (Breakthrough time: 1-4 hours).

Body protection (EN 14605): 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 (EN 143, 14387): 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.

Thermal hazards: Not applicable.

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 to light yellow

Odour: Acetic acid.

Odour threshold: Not applicable and/or not determined for the mixture.

pH: 1 [Conc. (% w/w): 100%]

Melting point/freezing point: Not applicable and/or not determined for the mixture.

Initial boiling point and boiling range: Not applicable and/or not determined for the mixture.

Flash point: > 100°C

Product does not support combustion.

Evaporation rate: Not applicable and/or not determined for the mixture.

Flammability (solid, gas): Not applicable and/or not determined for the mixture.

 Burning time: Not applicable and/or not determined for the mixture.

 Burning rate: Not applicable and/or not determined for the mixture.

Upper/lower flammability or explosive limits: Not applicable and/or not determined for the mixture.

Date of issue/Date of revision: 27 August 2013
SECTION 9: Physical and chemical properties

Vapour pressure : Not applicable and/or not determined for the mixture.
Vapour density : Not applicable and/or not determined for the mixture.
Relative density : 1.12
Solubility(ies) : Easily soluble in the following materials: cold water.
Partition coefficient: n-octanol/water : Not applicable and/or not determined for the mixture.
Auto-ignition temperature : Not applicable and/or not determined for the mixture.
Decomposition temperature : Not applicable and/or not determined for the mixture.
Viscosity : Not applicable and/or not determined for the mixture.
Explosive properties : Not applicable.
Oxidising properties : Yes.

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

<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>Hydrogen peroxide</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>486 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>&gt;40 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1060 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3310 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Peracetic acid</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>5.175 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>1012 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1634 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary : No known significant effects or critical hazards.

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>22488.9 mg/kg</td>
</tr>
<tr>
<td>Inhalation (vapours)</td>
<td>35.26 mg/l</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision : 27 August 2013

7/13
SECTION 11: Toxicological information

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peracetic acid</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>1 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary: No known significant effects or critical hazards.

Sensitiser

Conclusion/Summary: No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary: No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary: No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary: No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary: No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogenperoxide</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>Peracetic acid</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

No known significant effects or critical hazards.

Information on the likely routes of exposure: No known significant effects or critical hazards.

Potential acute health effects

Inhalation: May cause respiratory irritation.

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: Adverse symptoms may include the following: respiratory tract irritation, coughing.

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.

Date of issue/Date of revision: 27 August 2013
SECTION 11: Toxicological information

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

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

Conclusion/Summary : No known significant effects or critical hazards.

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 : No known significant effects or critical hazards.

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>Hydrogenperoxide</td>
<td>Acute EC50 1.38 mg/l</td>
<td>Aquatic plants</td>
<td>72 hours</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>Acute LC50 75 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>Peracetic acid</td>
<td>Acute EC50 0.73 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.2 ppm Fresh water</td>
<td>Fish - Cyprinus carpio - Young</td>
<td>30 days</td>
</tr>
</tbody>
</table>

Conclusion/Summary : No known significant effects or critical hazards.

12.2 Persistence and degradability

Conclusion/Summary : The ecological evaluation of the product is based on data from the raw material and/or comparable substances. The total of the organic components contained in the product achieve > 60% BOD/COD or CO2 liberation, or > 70% DOC reduction in tests for ease of degradability - threshold values for ‘readily degradable’ (e.g. to OECD method 301).

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>Hydrogenperoxide</td>
<td>-1.36</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>-0.17</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not determined for the mixture.

Mobility : Not determined for the mixture.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

Date of issue/Date of revision : 27 August 2013
SECTION 12: Ecological information

12.6 Other adverse effects
No known significant effects or critical hazards.

vPvB
Not applicable.

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. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste
Yes.

European waste catalogue (EWC)

<table>
<thead>
<tr>
<th>Waste code</th>
<th>Waste designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 09 03*</td>
<td>peroxides, for example hydrogen peroxide</td>
</tr>
</tbody>
</table>

Packaging
Methods of disposal
The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled.

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

<table>
<thead>
<tr>
<th>ADR/RID</th>
<th>ADN/ADNR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN number</td>
<td>UN3149</td>
<td>UN3149</td>
<td>UN3149</td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td>HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED</td>
<td>HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED</td>
<td>HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>5.1 (8)</td>
<td>5.1 (8)</td>
<td>5.1 (8)</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>II</td>
<td>II</td>
<td>II</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 27 August 2013
SECTION 14: Transport information

14.6 Special precautions for user

| None. | None. | None. | None. |

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

Not applicable.

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

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

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

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
DPD = Dangerous Preparations Directive [1999/45/EC]
EC = European Commission
EUH = European Union of Health
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
OEL = Occupational Exposure Limit
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]

Date of issue/Date of revision: 27 August 2013
### SECTION 16: Other information

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH # = 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 Corr. 1B, H314</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>STOT SE 3, H335</td>
<td>Expert judgment</td>
</tr>
</tbody>
</table>

**Full text of abbreviated H statements**

- **H226** Flammable liquid and vapour.
- **H242** Heating may cause a fire.
- **H271** May cause fire or explosion; strong oxidiser.
- **H302** Harmful if swallowed.
- **H312** Harmful in contact with skin.
- **H314** Causes severe skin burns and eye damage.
- **H319** Causes serious eye irritation.
- **H332** Harmful if inhaled.
- **H335** May cause respiratory irritation.
- **H400** Very toxic to aquatic life.

**Full text of classifications [CLP/GHS]**

- **Acute Tox. 4, H302** ACUTE TOXICITY: ORAL - Category 4
- **Acute Tox. 4, H312** ACUTE TOXICITY: SKIN - Category 4
- **Acute Tox. 4, H332** ACUTE TOXICITY: INHALATION - Category 4
- **Aquatic Acute 1, H400** AQUATIC TOXICITY (ACUTE) - Category 1
- **Eye Irrit. 2, H319** SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
- **Flam. Liq. 3, H226** FLAMMABLE LIQUIDS - Category 3
- **Org. Perox. D, H242** ORGANIC PEROXIDES - Type D
- **Ox. Liq. 1, H271** OXIDIZING LIQUIDS - Category 1
- **Skin Corr. 1A, H314** SKIN CORROSION/IRRIGATION - Category 1A
- **Skin Corr. 1B, H314** SKIN CORROSION/IRRITION - Category 1B
- **STOT SE 3, H335** SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3

**Full text of abbreviated R phrases**

- **R7-** May cause fire.
- **R8-** Contact with combustible material may cause fire.
- **R5-** Heating may cause an explosion.
- **R10-** Flammable.
- **R22-** Harmful if swallowed.
- **R20/21** Harmful by inhalation and if swallowed.
- **R20/21** Harmful by inhalation, in contact with skin and if swallowed.
- **R34-** Causes burns.
- **R35-** Causes severe burns.
- **R37-** Irritating to respiratory system.
- **R50-** Very toxic to aquatic organisms.

**Full text of classifications [DSD/DPD]**

- **O** - Oxidising
- **C** - Corrosive
- **Xn** - Harmful
- **Xi** - Irritant
- **N** - Dangerous for the environment

**Date of printing**

: 27 August 2013

**Date of issue/ Date of revision**

: 27 August 2013

**Date of previous issue**

: 22 February 2013

**Version**

: 7.01

**Notice to reader**
SECTION 16: Other information

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.