

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

- Trade name MIRATAINE H2C-HA

**1.2 Relevant identified uses of the substance or mixture and uses advised against****Uses of the Substance/Mixture**

- Surfactants for various applications
- (For further information, refer to the product technical data sheet)

**Remarks**

- This product may rapidly contribute towards a highly hazardous environment within a confined space (e.g. Within ISO tanks, reactors, silos, etc.).
- Risk assessments should be conducted prior to handling this product / material.

**1.3 Details of the supplier of the safety data sheet****Company**

Syensqo USA LLC.,  
2564 US HIGHWAY 1, LAWRENCE, NJ 08648 USA,  
Tel.: +1.609.860.4000

**E-mail address**

For questions about SDS content: [manager.sds@syensqo.com](mailto:manager.sds@syensqo.com)  
For all other topics use: [www.syensqo.com/en/form/documentation](http://www.syensqo.com/en/form/documentation)

**1.4 Emergency telephone number**

400 120 6011 (toll-free, access from China only)  
NRCC  
CHINA (DOMESTIC ONLY): +86 532 8388 9090 (Qingdao)  
MULTI LINGUAL EMERGENCY NUMBER (24/7)  
Europe/Latin America/Africa: +44 1235 239 670 (UK)  
Middle East/Africa speaking Arabic: +44 1235 239 671 (UK)  
Asia Pacific : +65 3158 1074 (Singapore)  
China : 400 120 6011 (toll-free, access from China only)  
North America : +1 800 424 9300



**SECTION 2: Hazards identification****2.1 Emergency overview**

<b>Appearance</b>	<b>Form:</b>	slightly viscous
	<b>Physical state:</b>	liquid (25 °C)
	<b>Colour:</b>	yellow
	<b>Odour</b>	slight
Causes skin irritation., Causes serious eye damage., Toxic to aquatic life.		

**2.2 Classification of the substance or mixture****GHS Classification and Labeling: Follow GB 15258 and GB 30000 series standard**

Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Short-term (acute) aquatic hazard, Category 2	H401: Toxic to aquatic life.

**2.3 Label elements****GHS Classification and Labeling: Follow GB 15258 and GB 30000 series standard****Hazardous products which must be listed on the label**

- CAS-No. 14960-06-6 Sodium Lauriminodipropionate

**Pictogram****Signal word**

- Danger

**Hazard statements**

- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H401 Toxic to aquatic life.

**Precautionary statements****General**

- None

**Prevention**

- P264 Wash skin thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ eye protection/ face protection.

**Response**

- P302 + P352 IF ON SKIN: Wash with plenty of water.
- P305 + P354 + P338 + P317 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.
- P332 + P317 If skin irritation occurs: Get medical help.
- P362 + P364 Take off contaminated clothing and wash it before reuse.

**Storage**

- None

**Disposal**

- P501 Dispose of contents/ container to an approved waste disposal plant.



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- Wash off immediately with soap and plenty of water.
- Use a mild soap if available.
  
- If skin irritation occurs, seek medical advice/attention.

**In case of eye contact**

- Rinse immediately with plenty of water, also under the eyelids.
- Take victim immediately to hospital.
- Continue rinsing eyes during transport to hospital.

**In case of ingestion**

- Do not induce vomiting without medical advice.
- Rinse mouth with water.
- Do not give anything to drink.
- Keep at rest.
- Consult a physician if necessary.

**4.2 Most important symptoms and effects, both acute and delayed**

- no data available

**4.3 Indication of any immediate medical attention and special treatment needed**

- no data available

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

- Extinguishing media - small fires
- Water spray
- Multi-purpose powders
- Carbon dioxide (CO<sub>2</sub>)
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)
  
- Extinguishing media - large fires
- Water spray
- Multi-purpose powders
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

**Unsuitable extinguishing media**

- Do not use a solid water stream as it may scatter and spread fire.

**5.2 Special hazards arising from the substance or mixture****Specific hazards during firefighting**

- The pressure in sealed containers can increase under the influence of heat.
- Aqueous liquid. Does not present any particular risk in the event of a fire.
  
- Hazardous decomposition products formed under fire conditions.  
(following evaporation of water)
- High concentrations of toxic or harmful products may remain in the residual liquid once the fire has been extinguished.

**Hazardous combustion products:**

- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
- Nitrogen oxides (NOx)

### 5.3 Advice for firefighters

#### Special protective equipment for firefighters

- Wear full protective clothing and self-contained breathing apparatus.
- Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.

#### Specific fire fighting methods

- Stay upwind.
- Fight fire with normal precautions from a reasonable distance.
- Do not use a solid water stream as it may scatter and spread fire.
- Cool down the containers/equipment exposed to heat with a water spray. Ensure that there is NO direct contact between the water and the product.
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Further information

- Evacuate personnel to safe areas.
- Intervention only by capable personnel who are trained and aware of the hazards of the product.
- Never approach containers which have been exposed to fire, without cooling them sufficiently.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- Avoid inhalation, ingestion and contact with skin and eyes.
- Wear chemical resistant personal protective equipment.
- Wear suitable gloves.
- Wear suitable protective clothing.
- Wear as appropriate:
  - Face-shield
  - Tightly fitting safety goggles.
- In the case of dust or aerosol formation use respirator with an approved filter.
- In the case of vapour formation use a respirator with an approved filter.
- Stop leak if safe to do so.
- For further information refer to section 8 "Exposure controls/personal protection".

### 6.2 Environmental precautions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by bunding.
- The product should not be allowed to enter drains, water courses or the soil.

### 6.3 Methods and materials for containment and cleaning up



- Stop leak if safe to do so.
- Dam up with sand or inert earth (do not use combustible materials).
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
- Shovel or sweep up.
- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.
- Wash non-recoverable remainder with large amounts of water.
- Clean contaminated surface thoroughly.
- Recover the cleaning water for subsequent disposal.
- Decontaminate tools, equipment and personal protective equipment in a segregated area.
- Dispose of in accordance with local regulations.

#### **Additional advice**

- Material can create slippery conditions.

#### **6.4 Reference to other sections**

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

### **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

- No specific risk when handled in accordance with good occupational hygiene and safety practice.
- Avoid contact with skin and eyes.
- Do not heat the product.
- Prior to use, shake well to restore the suspension.
- Provide adequate ventilation.
- Handle in accordance with good industrial hygiene and safety practice.
- Wear personal protective equipment.
- Wear suitable protective clothing.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Avoid splashes.
- Avoid formation of aerosol.
- For personal protection, see section 8.

#### **Hygiene measures**

- Handle in accordance with good industrial hygiene and safety practice.
- Use clean, well-maintained personal protection equipment.
- Regular cleaning of equipment, work area and clothing.
- When using do not eat, drink or smoke.
- Smoking, eating and drinking should be prohibited in the application area.
- Wash hands before breaks and immediately after handling the product.
- Contaminated work clothing should not be allowed out of the workplace.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

#### **7.2 Conditions for safe storage, including any incompatibilities**



**Technical measures/Storage conditions**

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer.
- Do not freeze.
- Keep away from: Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: Stability-Reactivity).

**Requirements for storage rooms and vessels**

**Recommended storage temperature:** 15 - 49 °C

- Do not freeze.

**7.3 Specific end use(s)**

- no data available

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

- Contains no substances with occupational exposure limit values above their regulatory reporting threshold.

**8.2 Exposure controls****Control measures****Engineering measures**

- Effective exhaust ventilation system.
- Ensure adequate ventilation.
- Extract at emission point.
- Ensure that extracted air cannot be returned to the workplace through the ventilation system.
- Avoid splashes.
- Avoid formation of aerosol.

**Individual protection measures****Respiratory protection**

- This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
- Use a respirator with an approved filter if a risk assessment indicates this is necessary.

**Hand protection**

- Where there is a risk of contact with hands, use appropriate gloves.
- Gloves must be inspected prior to use.
- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Use only personal protective equipment that conforms to international/ national standards (KOSHA, etc.).

**Suitable material**

- Nitrile rubber
- Neoprene



- PVC
- butyl-rubber

**Eye protection**

- Tightly fitting safety goggles.
- Face-shield

**Skin and body protection**

- Full protective suit
- Footwear protecting against chemicals.
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hygiene measures**

- Handle in accordance with good industrial hygiene and safety practice.
- Use clean, well-maintained personal protection equipment.
- Regular cleaning of equipment, work area and clothing.
- When using do not eat, drink or smoke.
- Smoking, eating and drinking should be prohibited in the application area.
- Wash hands before breaks and immediately after handling the product.
- Contaminated work clothing should not be allowed out of the workplace.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

**Protective measures**

- Emergency equipment immediately accessible, with instructions for use.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.
- The protective equipment must be selected in accordance with current local regulations and in cooperation with the supplier of the protective equipment.

**Environmental exposure controls**

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by bunding.
- The product should not be allowed to enter drains, water courses or the soil.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	liquid (25 °C)
<b>Form</b>	slightly viscous
<b>Colour</b>	yellow
<b>Odour</b>	slight
<b>Odour Threshold</b>	No data available
<b>Melting point/freezing point</b>	Freezing point: ca. 0 °C
<b>Initial boiling point and boiling range</b>	Boiling point/boiling range: ca. 100 °C
<b>Flammability (solid, gas)</b>	No data available
<b>Flammability (liquids)</b>	No data available
<b>Flammability/Explosive limit</b>	No data available



<b><u>Flash point</u></b>	Not applicable aqueous liquid for which the organic components have flash point > 100 °C
<b><u>Auto-ignition temperature</u></b>	No data available
<b><u>Decomposition temperature</u></b>	No data available
<b><u>pH</u></b>	6.0 - 7.0 ( 100 % ) pure product
<b><u>Viscosity</u></b>	No data available
<b><u>Solubility</u></b>	<u>Water solubility:</u> soluble  <u>Solubility in other solvents:</u> common organic solvents: insoluble  common organic solvents: partly soluble
<b><u>Partition coefficient: n-octanol/water</u></b>	No data available
<b><u>Vapour pressure</u></b>	< 31.33 hPa ( 25 °C )
<b><u>Density</u></b>	ca. 1.03 g/cm <sup>3</sup> ( 25 °C )
<b><u>Relative density</u></b>	No data available
<b><u>Relative vapor density</u></b>	No data available
<b><u>Particle characteristics</u></b>	No data available
<b><u>Evaporation rate (Butylacetate = 1)</u></b>	No data available
<b>9.2 Other information</b>	
<b><u>Oxidizing properties</u></b>	Not considered as oxidizing, Structure-activity relationship (SAR)

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

- Stable at normal ambient temperature and pressure.

### 10.2 Chemical stability

- Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

- No dangerous reaction known under conditions of normal use.

### 10.4 Conditions to avoid

- Keep away from open flames, hot surfaces and sources of ignition.
- Avoid excessive heat for prolonged periods of time.

### 10.5 Incompatible materials



- Strong oxidizing agents
- Strong reducing agents
- Strong acids
- Strong bases

### 10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (pyrolysis) releases:
- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
- Nitrogen oxides (NOx)

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Acute oral toxicity

Sodium Lauriminodipropionate

LD50 : 31,300 mg/kg - Rat , male and female  
Method: OECD Test Guideline 401  
Gavage  
Unpublished reports  
Not classified as harmful if swallowed  
No data available

##### Acute inhalation toxicity

No data available

##### Acute dermal toxicity

Sodium Lauriminodipropionate

LD50 : > 5,000 mg/kg - Rat , male and female  
Method: OECD Test Guideline 402  
Unpublished reports  
Semioclusive  
No mortality observed at this dose.  
Not classified as harmful by contact with skin  
No data available

##### Acute toxicity (other routes of administration)

#### Skin corrosion/irritation

Sodium Lauriminodipropionate

Rabbit  
Irritating to skin.  
Method: OECD Test Guideline 404  
Unpublished internal reports  
human skin  
Skin irritation  
Method: OECD Test Guideline 431  
  
Method: OECD Test Guideline 439  
  
in vitro assay  
Unpublished reports

#### Serious eye damage/eye irritation

Sodium Lauriminodipropionate

Rabbit  
Irreversible effects on the eye  
Method: OECD Test Guideline 405  
Unpublished internal reports

#### Respiratory or skin sensitisation

Sodium Lauriminodipropionate

Guinea pig  
Does not cause skin sensitisation.  
Unpublished reports

#### Mutagenicity



**Genotoxicity in vitro**

Sodium Lauriminodipropionate

Mutagenicity (Salmonella typhimurium - reverse mutation assay)  
with and without metabolic activation

negative

Method: OECD Test Guideline 471

Unpublished reports

Chromosome aberration test in vitro

Strain: Chinese hamster ovary cells

with and without metabolic activation

negative

Method: OECD Test Guideline 473

Unpublished reports

In vitro gene mutation study in mammalian cells

Strain: Chinese hamster ovary cells

with and without metabolic activation

negative

Method: OECD Test Guideline 476

Unpublished reports

**Genotoxicity in vivo****Carcinogenicity**

No data available

No data available

**Toxicity for reproduction and development****Toxicity to reproduction/Fertility**

Sodium Lauriminodipropionate

Reproduction/developmental toxicity screening test - Rat, male, Oral exposure

Fertility NOEL: 600 mg/kg

Developmental Toxicity NOAEL F1: 600 mg/kg

Method: OECD Test Guideline 422

Reproduction/developmental toxicity screening test - Rat, female, Oral exposure

Fertility NOEL: 600 mg/kg

Method: OECD Test Guideline 422

category approach, tested on C12-C18, Gavage, Unpublished reports, no  
impairment of fertility has been observed, No effect observed in male or female  
reproductive system in repeated dose tox studies .**Developmental Toxicity/Teratogenicity**

Sodium Lauriminodipropionate

Rat, male and female, Dermal

Method: OECD Test Guideline 414

Published data, No effect observed on development, no embryotoxic or  
teratogenic effects have been observed**STOT****STOT - single exposure**

Sodium Lauriminodipropionate

The substance or mixture is not classified as specific target organ toxicant, single  
exposure.

Internal evaluation., tested on C12

**STOT - repeated exposure**

Sodium Lauriminodipropionate

The substance or mixture is not classified as specific target organ toxicant,  
repeated exposure.

category approach, tested on C8-C18, Internal evaluation.

Sodium Lauriminodipropionate

Oral exposure 28 Days - Rat , male

NOAEL: 160 mg/kg



Oral exposure 49 Days - Rat , female  
NOAEL: 160 mg/kg

Method: OECD Test Guideline 422  
category approach  
tested on C12-C18  
Subacute toxicity  
Gavage  
Unpublished reports  
Not considered to cause serious damage to health on repeated exposure

**Experience with human exposure**  
**Aspiration toxicity**

No data available  
No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

#### **Aquatic Compartment**

##### **Acute toxicity to fish**

Sodium Lauriminodipropionate

By analogy

LC50 - 96 h : 4.2 mg/l - Oncorhynchus mykiss (rainbow trout)  
semi-static test  
Analytical monitoring: no

Method: OECD Test Guideline 203  
Fresh water  
Unpublished reports  
Toxic to fish.

Information given is based on data obtained from similar substances.

##### **Acute toxicity to daphnia and other aquatic invertebrates**

Sodium Lauriminodipropionate

EC50 - 48 h : 1.71 mg/l - Daphnia magna (Water flea)  
static test

Analytical monitoring: yes  
Method: Directive 67/548/EEC, Annex V, C.2.  
Fresh water  
Unpublished reports  
Toxic to aquatic invertebrates.

##### **Toxicity to aquatic plants**

Sodium Lauriminodipropionate

By analogy

ErC50 - 72 h : 31 mg/l - Chlorella vulgaris (Fresh water algae)  
static test

Analytical monitoring: no  
Method: OECD Test Guideline 201  
Fresh water  
Unpublished reports  
Harmful to algae.

Information given is based on data obtained from similar substances.

##### **Toxicity to microorganisms**



Sodium Lauriminodipropionate EC10 - 3 h : 330 mg/l - activated sludge static test  
Method: OECD Test Guideline 209  
Fresh water  
Unpublished reports

**Chronic toxicity to fish** No data available

**Chronic toxicity to daphnia and other aquatic invertebrates**

Sodium Lauriminodipropionate NOEC: 15 mg/l - 21 Days - Daphnia magna (Water flea) semi-static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 211  
Fresh water  
Unpublished reports  
No adverse chronic effect observed up to and including the threshold of 1 mg/L.

## 12.2 Persistence and degradability

### Abiotic degradation

**Stability in water** Conclusion is not possible for a mixture as a whole.

**Photodegradation** Conclusion is not possible for a mixture as a whole.

### Physical- and photo-chemical elimination

**Physico-chemical removability** Conclusion is not possible for a mixture as a whole.

### Biodegradation

**Biodegradability** As (bio)degradability is not relevant for mixtures, all the components of the mixture were assessed individually (rapid degradability assessment available below).

### Degradability assessment

Sodium Lauriminodipropionate The product is considered to be rapidly degradable in the environment

## 12.3 Bioaccumulative potential

### **Partition coefficient: n-octanol/water**

Sodium Lauriminodipropionate Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

**Bioconcentration factor (BCF)** No data available

## 12.4 Mobility in soil

**Adsorption potential (Koc)** Conclusion is not possible for a mixture as a whole.

**Known distribution to environmental compartments** No data available

## 12.5 Results of PBT and vPvB assessment

Sodium Lauriminodipropionate Not persistent, bioaccumulative, and toxic (PBT).  
Not very persistent and very bioaccumulative (vPvB).

## 12.6 Other adverse effects



**Ecotoxicity assessment****Short-term (acute) aquatic hazard**

Sodium Lauriminodipropionate Toxic to aquatic life.

**Long-term (chronic) aquatic hazard**

Sodium Lauriminodipropionate No adverse chronic effect observed up to and including the threshold of 1 mg/L.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product Disposal*****Prohibition***

- Do not discharge directly into the environment.
- Dispose of in accordance with local regulations.

**Advice on cleaning and disposal of packaging*****Prohibition***

- Do NOT dispose of untreated packaging with industrial waste.
- Do not dispose of with domestic refuse.
- Empty remaining contents.
- Clean using steam.
- Monitor the residual vapours.
- Dispose of rinse water in accordance with local and national regulations.
- Containers that cannot be cleaned must be treated as waste.
- Dispose of contents/ container to an approved waste disposal plant.
- Dispose of in accordance with local regulations.
- Where possible recycling is preferred to disposal or incineration.
- The recycled material must be completely dry and free of pollutants.

**SECTION 14: Transport information****CN DG**

not regulated

**IMDG**

not regulated

**IATA**

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Following last version of regulations are applicable for the chemical classification, SDS and label:**



- Specification for classification and labelling of chemicals, GB 30000 series standard
- General rules for preparation of precautionary label for chemicals, GB 15258
- Safety data sheet for chemical products—Content and order of sections, GB/T 16483
- GB/T 17519 Guidance on the compilation of safety data sheet for chemical products
- Decree No. 591 of the State Council of the People's Republic of China: Regulations on the Control over Safety of Hazardous Chemicals
- List of dangerous goods GB 12268
- Classification and code of dangerous goods GB 6944

**Notification status**

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australian Inventory of Industrial Chemicals (AIIC)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIoC inventory. Additional HSNO obligations may apply. Please refer to Section 15 of SDS for New Zealand.
EU. European Registration, Evaluation, Authorization and Restriction of Chemical (REACH)	- When purchased from a Syensqo legal entity based in the EEA ("European Economic Area"), this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.
Korea. Act on Registration and Evaluation of Chemicals	- When purchased from a Syensqo legal entity based in Korea, this product is compliant with "Act on Registration and Evaluation of Chemicals" (AREC or K-REACH, Article 10) as all its components are either excluded, exempt, and/or (pre)registered. When purchased from a legal entity outside of Korea, please contact your local representative for additional information.



**SECTION 16: Other information****Full text of H-Statements**

- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H401: Toxic to aquatic life.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO-TI: Technical Instructions for Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- TWA: Time weighted average
- ATE: Estimated value of acute toxicity
- EC: European Community number
- CAS: Chemical Abstracts Service.
- LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50: Substance concentration causing 50% (half) death in the test animals group.
- EC50: Effective Concentration of the substance causing the maximum of 50%.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.
- GHS/CLP/SEA: Classification, labeling, packaging regulation
- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- STOT: Specific Target Organ Toxicity

**Not all acronyms listed above are referenced in this SDS.**

**Further information**

- Distribute new edition to clients
- Update
- See section 1

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. The information exclusively relates to the designated product in its unaltered state. Safety and health hazards may change if such product is used in combination with other materials or in any other manufacturing process. Users are responsible for compliance with all regulations linked to product related activities, and to use the products in accordance with technical instructions given by Syensqo, if any.

