

Safety Data Sheet

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

EPIKURE™ Curing Agent MGS LH 340

Revision Date 12-SEP-2011

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

1.1. Product identifier

Product name EPIKURE™ Curing Agent MGS LH 340
SDS Number 16S-00061

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

Product use

1.3. Details of the supplier of the safety data sheet

Manufacturer, importer, supplier : Momentive Specialty Chemicals B.V.
Seattleweg 17
3195 ND Pernis - Rotterdam
The Netherlands

Contact person : 4information@momentive.com

Telephone : **General Information:**
+31 6 52 511079

1.4. Emergency telephone number

: **Emergency telephone:**
CARECHEM24
+44(0)1235 239 670

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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, R21/22
C, R34
R43
R52/53

Human health hazards : Harmful in contact with skin and if swallowed. Causes burns. May cause sensitization by skin contact.

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

See section 16 for the full text of the R-phrases declared above

2.2. Label elements

Symbol(s)	:	
		Corrosive
Risk phrases	:	R21/22 - Harmful in contact with skin and if swallowed. R34 - Causes burns. R43 - May cause sensitization by skin contact. R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	:	S23 -Do not breathe gas/fumes/vapor/spray. S26 -In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 -Wear suitable protective clothing, gloves and eye/face protection. S45 -In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S60 -This material and its container must be disposed of as hazardous waste.
Contains	:	Poly(oxypropylene) diamine MW 230, Poly(oxypropylene) diamine MW 400, 3-aminomethyl-3,5,5-trimethylcyclohexylamine,
Product use	:	Industrial applications

2.3. Other hazards

Based on the substance information, the mixture is not expected to meet the criteria for PBT/vPvB.

SECTION 3: Composition/information on ingredients
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Substance/mixture : Preparation

Ingredient name	REG # /CAS #/EC #	Classification		%
		Symbol(s)/Hazard Class and Category Code(s)	R-Phrases /Hazard statement Code(s)	
Poly(oxypropylene) diamine MW 230	9046-10-0/	C;	C; R34	35 - 50
Poly(oxypropylene) diamine MW 400	9046-10-0/	C; Xn;	Xn; R21/22 C; R34 R52/53	25 - 35
		Aquatic Chronic 3 Skin Corr./Irrit. 1B Acute Tox. 4 Acute Tox. 4	H412 H314 H302 H312	

3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2/ 220-666-8	C;	C; R34 Xn; R21/22 R43 R52 R53	15 - 20
		Acute Tox. 4 Acute Tox. 4 Skin Sens. 1 Skin Corr./Irrit. 1B Aquatic Chronic 3	H312 H302 H317 H314 H412	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First aid measures

Inhalation

- : Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. 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. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately. If unconscious, place in recovery position and get medical attention immediately. 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.

Ingestion

- : Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. 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.

Skin contact

- : 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. Get medical attention immediately. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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 immediately. Chemical burns must be treated promptly by a physician.

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

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : Adverse symptoms may include the following: stomach pains,
- Skin** : Adverse symptoms may include the following: pain or irritation, redness, blistering may occur
- Eyes** : Adverse symptoms may include the following: pain, watering, redness,

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

4.3. Indication of 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.
- Protection of first aid personnel** : 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.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : 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 thermal decomposition products** : Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides,

5.3. Special protective actions for fire-fighters

- 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. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Special protective equipment** : Fire-fighters should wear appropriate protective equipment

for fire-fighters

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

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 spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Avoid dispersal of spilled 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.

6.3. Methods and material 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 or 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 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 (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Put on appropriate personal protective equipment (see section 8). 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. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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.

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. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials**Recommended**

: Use original container.

7.3. Specific end use(s)

Not applicable.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limit values****Ingredient name****Occupational exposure limits****Europe**

No exposure limit value known.

Sweden

No exposure limit value known.

Denmark

No exposure limit value known.

Norway

No exposure limit value known.

France

No exposure limit value known.

Netherlands

No exposure limit value known.

Germany

No exposure limit value known.

Finland

No exposure limit value known.

United Kingdom (UK)

No exposure limit value known.

Austria

No exposure limit value known.

Switzerland

No exposure limit value known.

Belgium

No exposure limit value known.

Spain

No exposure limit value known.

Turkey

No exposure limit value known.

Czech Republic

No exposure limit value known.

Ireland

No exposure limit value known.

Italy

No exposure limit value known.

Estonia

No exposure limit value known.

Lithuania

No exposure limit value known.

Slovakia

No exposure limit value known.

Hungary

No exposure limit value known.

Poland

No exposure limit value known.

Slovenia

No exposure limit value known.

Latvia

3-aminomethyl-3,5,5-trimethylcyclohexylamine

OELTime Weighted Average (TWA) 1 mg/m³**Greece**

No exposure limit value known.

Portugal

No exposure limit value known.

Bulgaria

No exposure limit value known.

Romania

No exposure limit value known.

8.2. Exposure controls**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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Occupational exposure controls

: If user operations generate dust, fumes, gas, vapor 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.

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.

- 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.
- 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.
- Eye 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 or dusts.
- Skin 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.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	: Liquid
Color	: Blue.
Odor	: Amine-like.
Odor threshold	: Not determined
pH	: Not determined
Initial boiling point and boiling range	: Greater than 240 °C (464 °F)
Flash point	: Greater than 100 °C (212 °F)
Evaporation rate	: Not determined
Flammability	: Not determined
Explosion limits	
Upper:	: Not determined
Lower:	: Not determined
Vapor pressure	: Not determined
Vapor density	: Not determined
Relative density	: Not determined
Solubility	: insoluble
Partition coefficient: n-octanol/water	: Not determined
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
Explosive properties	: Not determined
Oxidising properties	: Not determined

9.2. Other information

Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

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

Summary of health effects based on the conventional method of Directive 1999/45/EC

Harmful in contact with skin and if swallowed. Causes burns. May cause sensitization by skin contact.

11.1. Information on toxicological effects

EPIKURE™ Curing Agent MGS LH 340

Acute toxicity

Oral

No applicable toxicity data.

Dermal

No applicable toxicity data.

Inhalation

No applicable toxicity data.

Other routes

No applicable toxicity data.

Irritation/Corrosion

No applicable toxicity data.

Skin sensitization

No applicable toxicity data.

Respiratory sensitization

No applicable toxicity data.

Repeated Dose Toxicity

No applicable toxicity data.

Carcinogenicity

No applicable toxicity data.

Mutagenicity

No applicable toxicity data.

Toxic to Reproduction

No applicable toxicity data.

Poly(oxypropylene) diamine MW 230**Acute toxicity****Oral**

LD50: Rat 2,880 mg/kg;

Dermal

LD50: Rabbit 2,980 mg/kg;

Inhalation

No applicable toxicity data. No known significant effects or critical hazards.

Other routes

No applicable toxicity data. No known significant effects or critical hazards.

Skin corrosion/irritation

No applicable toxicity data. No known significant effects or critical hazards.

Serious eye damage/irritation

No applicable toxicity data. No known significant effects or critical hazards.

Skin sensitization

No applicable toxicity data. No known significant effects or critical hazards.

Respiratory sensitization

No applicable toxicity data. No known significant effects or critical hazards.

Germ cell mutagenicity

No applicable toxicity data. No known significant effects or critical hazards.

Carcinogenicity

No applicable toxicity data. No known significant effects or critical hazards.

Reproductive toxicity

No applicable toxicity data. No known significant effects or critical hazards.

Developmental / Teratogenicity

No applicable toxicity data. No known significant effects or critical hazards.

STOT-single exposure

No applicable toxicity data. No known significant effects or critical hazards.

STOT-repeated exposure

No applicable toxicity data. No known significant effects or critical hazards.

Aspiration hazard

No applicable toxicity data. No known significant effects or critical hazards.

Other information

No applicable toxicity data. No known significant effects or critical hazards.

Poly(oxypropylene) diamine MW 400**Acute toxicity****Oral**

LD50: Rat 1,100 mg/kg;

Dermal

LD50: Rabbit 1,550 mg/kg;

Inhalation

No applicable toxicity data. No known significant effects or critical hazards.

Other routes

No applicable toxicity data. No known significant effects or critical hazards.

Skin corrosion/irritation

No applicable toxicity data. No known significant effects or critical hazards.

Serious eye damage/irritation

No applicable toxicity data. No known significant effects or critical hazards.

Skin sensitization

No applicable toxicity data. No known significant effects or critical hazards.

Respiratory sensitization

No applicable toxicity data. No known significant effects or critical hazards.

Germ cell mutagenicity

No applicable toxicity data. No known significant effects or critical hazards.

Carcinogenicity

No applicable toxicity data. No known significant effects or critical hazards.

Reproductive toxicity

No applicable toxicity data. No known significant effects or critical hazards.

Developmental / Teratogenicity

No applicable toxicity data. No known significant effects or critical hazards.

STOT-single exposure

No applicable toxicity data. No known significant effects or critical hazards.

STOT-repeated exposure

No applicable toxicity data. No known significant effects or critical hazards.

Aspiration hazard

No applicable toxicity data. No known significant effects or critical hazards.

Other information

No applicable toxicity data. No known significant effects or critical hazards.

3-aminomethyl-3,5,5-trimethylcyclohexylamine**Acute toxicity****Oral**

LD50: Rat 1,030 mg/kg;

Dermal

No applicable toxicity data. No known significant effects or critical hazards.

Inhalation

No applicable toxicity data. No known significant effects or critical hazards.

Other routes

No applicable toxicity data. No known significant effects or critical hazards.

Skin corrosion/irritation

No applicable toxicity data. No known significant effects or critical hazards.

Serious eye damage/irritation

No applicable toxicity data. No known significant effects or critical hazards.

Skin sensitization

No applicable toxicity data. No known significant effects or critical hazards.

Respiratory sensitization

No applicable toxicity data. No known significant effects or critical hazards.

Germ cell mutagenicity

No applicable toxicity data. No known significant effects or critical hazards.

Carcinogenicity

No applicable toxicity data. No known significant effects or critical hazards.

Reproductive toxicity

No applicable toxicity data. No known significant effects or critical hazards.

Developmental / Teratogenicity

No applicable toxicity data. No known significant effects or critical hazards.

STOT-single exposure

No applicable toxicity data. No known significant effects or critical hazards.

STOT-repeated exposure

No applicable toxicity data. No known significant effects or critical hazards.

Aspiration hazard

No applicable toxicity data. No known significant effects or critical hazards.

Other information

No applicable toxicity data. No known significant effects or critical hazards.

SECTION 12: Ecological information

Summary of environmental hazards based on the conventional method of Directive 1999/45/EC

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

EPIKURE™ Curing Agent MGS LH 340

No applicable toxicity data.

Poly(oxypropylene) diamine MW 230

No applicable toxicity data. No known significant effects or critical hazards.

Poly(oxypropylene) diamine MW 400

No applicable toxicity data. No known significant effects or critical hazards.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

No applicable toxicity data. No known significant effects or critical hazards.

12.2. Persistence and degradability

EPIKURE™ Curing Agent MGS LH 340

No data available.

Poly(oxypropylene) diamine MW 230

No data available.

Poly(oxypropylene) diamine MW 400

No data available.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

No data available.

12.3. Bioaccumulative potential

EPIKURE™ Curing Agent MGS LH 340

No data available.

Poly(oxypropylene) diamine MW 230

No data available.

Poly(oxypropylene) diamine MW 400

No data available.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

No data available.

12.4. Mobility in soil

EPIKURE™ Curing Agent MGS LH 340

No data available.

Poly(oxypropylene) diamine MW 230

No data available.

Poly(oxypropylene) diamine MW 400

No data available.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

No data available.

12.5. Results of PBT and vPvB assessment

EPIKURE™ Curing Agent MGS LH 340

Based on the substance information, the mixture is not expected to meet the criteria for PBT/vPvB.

Poly(oxypropylene) diamine MW 230

No data available.

Poly(oxypropylene) diamine MW 400

No data available.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

No data available.

12.6. Other adverse effects

EPIKURE™ Curing Agent MGS LH 340

No known adverse effects.

Poly(oxypropylene) diamine MW 230

No known adverse effects.

Poly(oxypropylene) diamine MW 400

No known adverse effects.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

No known adverse effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

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

SECTION 14: Transport information

Regulatory information	14.1. UN number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group
ADR	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ALKYLETHERAMINE)	8	II
RID	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ALKYLETHERAMINE)	8	II
ICAO/IATA	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ALKYLETHERAMINE)	8	II
IMO/IMDG	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ALKYLETHERAMINE)	8	II

14.5. Environmental hazards

Environmentally hazardous and/or Marine Pollutant : No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 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 regulations

SEVESO Directive 96/82/EC	:	<u>Ingredient name</u>	<u>Listed</u>
		<i>Poly(oxypropylene) diamine MW 230</i>	No.
		<i>Poly(oxypropylene) diamine MW 400</i>	No.
		<i>3-aminomethyl-3,5,5-trimethylcyclohexylamine</i>	No.

REACH Annex XVII :

Biocides - Annex I to Directive 98/8/EC : Not listed

Prior Informed Consent. List of : Not listed

**chemicals subject to the
international PIC procedure
(Part I, II, III)**

**Integrated pollution prevention
and control list (IPPC) - Air** : Not listed

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

National regulations

Denmark

MAL-code : 3 - 5

International regulations

Chemical inventories REACH Status The substance(s) in this product has (have) been Pre-Registered and/or Registered, or are exempted from registration, according to Regulation (EC) No. 1907/2006 (REACH).
 Europe inventory Not determined.
 Australia inventory (AICS) Not determined.
 China inventory (IECSC) All components are listed or exempted.
 Japan inventory (ENCS) Not determined.
 Japan inventory (ISHL) Not determined.
 Korea inventory (KECI) All components are listed or exempted.
 New Zealand Inventory (NZIoC) Not determined.
 Philippines inventory (PICCS) All components are listed or exempted.
 Canada inventory At least one component is not listed in DSL but all such components are listed in NDSL.
 United States inventory (TSCA 8b) All components are listed or exempted.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not applicable.

SECTION 16: Other information

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

Full text of abbreviated H statements : H412 - Harmful to aquatic life with long lasting effects.
 H314 - Causes severe skin burns and eye damage.
 H302 - Harmful if swallowed.
 H312 - Harmful in contact with skin.
 H312 - Harmful in contact with skin.
 H302 - Harmful if swallowed.
 H317 - May cause an allergic skin reaction.
 H314 - Causes severe skin burns and eye damage.
 H412 - Harmful to aquatic life with long lasting effects.

Full text of classifications (CLP) : AQUATIC TOXICITY (CHRONIC) Category 3 - H412
 SKIN CORROSION/IRRITATION Category 1B - H314
 Acute toxicity Oral Category 4 - H302
 Acute toxicity Dermal Category 4 - H312
 Acute toxicity Dermal Category 4 - H312
 Acute toxicity Oral Category 4 - H302
 SKIN SENSITIZATION Category 1 - H317
 SKIN CORROSION/IRRITATION Category 1B - H314
 AQUATIC TOXICITY (CHRONIC) Category 3 - H412

Full text of abbreviated R : R21/22- Harmful in contact with skin and if swallowed.

phrases R34- Causes burns.
R43- May cause sensitization by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classification (DSD/DPD) : C Corrosive
Xn Harmful

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

History

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Notice to reader

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