

01-41005

## Safety Data Sheet

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

## **EPIKURE ™ Curing Agent MGS LH 285**

Revision Date 15-AUG-2012

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

1.1. Product identifier

**Product name** 

EPIKURE ™ Curing Agent MGS LH 285

**SDS Number** 

16S-00025

**Product Type** 

**Curing Agent** 

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

**Product use** 

**Epoxy Resin Systems** 

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

R52/53

R43 C, R34 Xn, R21/22

**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

Version 2.0

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1/17

#### 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
Product use

: 3-aminomethyl-3,5,5-trimethylcyclohexylamine,

: 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**

Substance/mixture

Mixture

Ingredient name	REG#/CAS #/EC#	Classification		%
		Symbol(s)/Hazard Class and Category Code(s)	/Hazard	
3-aminomethyl-3,5,5-trimethylcyclohex ylamine	2855-13-2/ 220-666-8	C;	C; R34 Xn; R21/22 R43 R52/53	70 - 90
		Acute Tox. 4 Acute Tox. 4 Skin Sens. 1 Skin Corr./Irrit. 1B Aquatic Chronic 3	H302 H302 H317 H314 H412	
benzyl alcohol	100-51-6/ 202-859-9	Xn;	Xn; R20/22	7 - 10
		Acute Tox. 4 Acute Tox. 4	H332 H302	

4-nony phenol, branched	84852-15-3/ 284-325-5	C; N;	Repr.Cat.3; R62 R63 C; R34 Xn; R22	1 - 2
			N; R50 R53	
		Acute Tox. 4 Skin Corr./Irrit. 1B Repr. 2 Aquatic Chronic 1	H302 H314 H361fd H410	
		Aquatic Acute 1	H400	

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

#### <u>First aid measures</u> 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.

Eve 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 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

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

Version 2.0

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.

Specific uses

Epoxy Resin Systems

#### 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

Germany

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 Odor Odor threshold : Not determined: Not determined: Not determined

pH

Not determined Greater than 200 °C (392 °F)

Initial boiling point and boiling :

range

Flash point

Greater than 100 °C (212 °F)

Evaporation rate Flammability

Not determinedNot determined

Explosion limits

Upper: Lower: Vapor pressure Vapor density Not determinedNot determinedNot determinedNot determined

Relative density Solubility [Water]

Not determined Soluble

Partition coefficient:

: Not determined

n-octanol/water

Auto-ignition temperature
Decomposition temperature

Not determined Not determined

Viscosity

Kinematic-Not determined

Dynamic- Approx. 50 - 100 mPa·s @25 °C (77 °F) ISO

9371

Explosive properties Oxidising properties

Not determined 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**

<u>Summary of health effects based on the conventional method of Directive 1999/45/EC</u> 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 285

#### **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.

#### 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.

#### 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.

#### benzyi alcohol

#### **Acute toxicity**

#### Oral

LD50: Rat 1,230 mg/kg;

#### Dermal

LD50: Rabbit 2,000 mg/kg;

#### Inhalation

LC50: Rat > 4.178 mg/l/4 h

#### 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.

#### <u>Carcinogenicity</u>

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.

#### 4-nonylphenol, branched

### **Acute toxicity**

#### Oral

LD50: Rat 1,300 mg/kg;

#### Dermal

LDLo: Rabbit 3,160 mg/kg;

#### Inhalation

No applicable toxicity data.

#### 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**

## <u>Summary of environmental hazards based on the conventional method of Directive</u> 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 285

No applicable toxicity data.

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

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

### benzyl alcohol

Fresh water LC50: 460 mg/l/96 h Fathead minnow

#### 4-nonylphenol, branched

Fresh water LC50: 0.13825 mg/l/96 h Fathead minnow

Fresh water LC50: 0.1351 mg/l/96 h Bluegill

### 12.2. Persistence and degradability

### EPIKURE ™ Curing Agent MGS LH 285

No data available.

### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

No data available.

#### benzyl alcohol

No data available.

### 4-nonylphenol, branched

No data available.

#### 12.3. Bioaccumulative potential

### EPIKURE ™ Curing Agent MGS LH 285

No data available.

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

No data available.

### benzyl alcohol

No data available.

## 4-nonyiphenoi, branched

No data available.

#### 12.4. Mobility in soil

### EPIKURE ™ Curing Agent MGS LH 285

No data available.

### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

No data available.

#### benzyl alcohol

No data available.

## 4-nonylphenol, branched

No data available.

#### 12.5. Results of PBT and vPvB assessment

#### **EPIKURE ™ Curing Agent MGS LH 285**

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

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

No data available.

#### benzyl alcohol

No data available.

#### 4-nonylphenol, branched

No data available.

#### 12.6. Other adverse effects

#### EPIKURE ™ Curing Agent MGS LH 285

No known adverse effects.

#### 3-aminomethyl-3,5,5-trimethylcyclohexylamine

No known adverse effects.

#### benzyl alcohol

No known adverse effects.

### 4-nonylphenol, branched

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. (ISOPHORONEDIAMINE (MIXTURE))	8	III
RID	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE (MIXTURE))	8	III
ICAO/IATA	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE (MIXTURE))	8	III
IMO/IMDG	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE (MIXTURE))	8	III

### 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 : Ingredient name 3-aminomethyl-3,5,5-trimethylcyc lohexylamine benzyl alcohol No.

**4-nonylphenol, branched** yes

REACH Annex XVII : Not listed

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

Prior Informed Consent. List of : The following components are listed: 4-nonylphenol, chemicals subject to the branched

international PIC procedure (Part I, II, III)

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

Integrated pollution prevention : Not listed

### and control list (IPPC) - Water

#### Germany

Hazard class for water

WGK 2, Appendix No. 4

#### **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).

Australia inventory (AICS) Not determined.

Canada inventory At least one component is not listed in DSL but all

such components are listed in NDSL. Japan inventory Not determined.

China inventory (IECSC) All components are listed or exempted.

Korea inventory All components are listed or exempted. New Zealand Inventory (NZIoC) Not determined.

Philippines inventory (PICCS) All components are listed or exempted.

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

H302 - Harmful if swallowed.

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.

H332 - Harmful if inhaled. H302 - Harmful if swallowed. H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage. H361fd - Suspected of damaging fertility. Suspected of

damaging the unborn child.

H410 - Very toxic to aquatic life with long lasting effects.

H400 - Very toxic to aquatic life.

#### Full text of classifications (CLP)

Acute toxicity Dermal Category 4 - H302 Acute toxicity Oral Category 4 - H302

SKIN SENSITIZATION Category 1 - H317

SKIN CORROSION/IRRITATION Category 1B - H314 AQUATIC TOXICITY (CHRONIC) Category 3 - H412 Acute toxicity Inhalation (unknown test type) Category 4 -

Acute toxicity Oral Category 4 - H302 Acute toxicity Oral Category 4 - H302

SKIN CORROSION/IRRITATION Category 1B - H314 TOXIC TO REPRODUCTION Category 2 - H361fd AQUATIC TOXICITY (CHRONIC) Category 1 - H410 AQUATIC TOXICITY (ACUTE) Category 1 - H400

## Full text of abbreviated R

phrases

R62- Possible risk of impaired fertility.

R63 R63- Possible risk of harm to the unborn child.

R22- Harmful if swallowed.

R20/22- Harmful by inhalation and if swallowed. R21/22- Harmful in contact with skin and if swallowed. R34- Causes burns.

R43- May cause sensitization by skin contact.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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

N Dangerous for the environment.

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

**History** 

Date of printing: 10.01.2013Date of issue/ Date of revision: 15.08.2012Date of previous issue: 29.02.2012Version: 2.0

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