

# Safety data sheet

## according to Directive (EC) No. 1907/2006



Trading name: Insulation layer creator DSX

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### 1. Designation of the substance or mixture and the company

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#### 1.1 Product identifier

Trading name: Insulation layer creator DSX  
Article number: 7202300/7202302  
Type: DSX-K/DSX-E

#### 1.2 Relevant identified uses of the substance or mixture and uses we would not recommend

##### Identified use

Fire protection material

#### 1.3 Details on the supplier providing the safety data sheet

##### Manufacturer/supplie

OBO Bettermann Holding GmbH & Co. KG  
Hüingser Ring 52  
58710 Menden  
Germany

##### Division providing information

Customer Service  
Tel.: +49 2373 89 - 17 00  
E-Mail: info@obo.de

#### 1.4 Emergency telephone number

REACH Registration of Chemicals GmbH  
Tel.: +49 (0)700 24112112 (OBO)  
Tel.: +1 872 5888271 (OBO)

### 2. Hazards identification

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#### 2.1 Classification of the substance or mixture

##### Regulation (EC) No. 1272/2008 [CLP]

Carcinogenicity, Category 2	H351
Reproductive toxicity, Category 2	H361f
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
Full text of H- and EUH-statements: see section 16	

## Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Harmful to aquatic life with long lasting effects.

## 2.2 Label elements

### Regulation (EC) No. 1272/2008 [CLP]

#### Labelling information

The product is labelled according to the Directive (EC) no. 1272/2008 (GHS).

#### Hazard pictograms



#### Signal word

Warning

#### Contains

Melamine

#### Hazard statements

H351 - Suspected of causing cancer.

H361f - Suspected of damaging fertility.

H412 - Harmful to aquatic life with long lasting effects.

#### Precautionary statements

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P273 - Avoid release to the environment.

P280 - Wear eye protection, protective gloves.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### EUH-statements

EUH208 - Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

## 2.3 Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

### 3. Composition/information on ingredients

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Melamine substance listed as REACH Candidate	CAS-No.: 108-78-1 EC-No.: 203-615-4 EC Index-No.: 613-345-00-2	≥ 5 – < 10	Carc. 2, H351 Repr. 2, H361f STOT RE 2, H373
Titanium dioxide (Note 10)	CAS-No.: 13463-67-7 EC-No.: 236-675-5 EC Index-No.: 022-006-00-2 REACH-no: 01-2119489379-17	≥ 5 – < 10	Carc. 2, H351
Triphenyl phosphate	CAS-No.: 115-86-6 EC-No.: 204-112-2	≥ 0,1 – < 1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS-No.: 55965-84-9 EC-No.: 911-418-6 EC Index-No.: 613-167-00-5 REACH-no: 01-2120764691-48	< 0,001	Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Oral), H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS-No.: 55965-84-9 EC-No.: 911-418-6 EC Index-No.: 613-167-00-5 REACH-no: 01-2120764691-48	( 0,0015 ≤ C ≤ 100) Skin Sens. 1A, H317 ( 0,06 ≤ C < 0,6) Eye Irrit. 2, H319 ( 0,06 ≤ C < 0,6) Skin Irrit. 2, H315 ( 0,6 ≤ C ≤ 100) Eye Dam. 1, H318 ( 0,6 ≤ C ≤ 100) Skin Corr. 1C, H314

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

Full text of H- and EUH-statements: see section 16

## 4. First aid measures

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### 4.1 General

IF exposed or concerned: Get medical advice/attention.

#### After inhalation

Remove person to fresh air and keep comfortable for breathing.

#### After skin contact

Wash skin with plenty of water.

#### After eye contact

Rinse eyes with water as a precaution.

#### After ingestion

Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact: May cause sensitisation of susceptible persons by skin contact.

Chronic symptoms: Suspected of causing cancer. Suspected of damaging fertility.

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

Treat symptomatically.

## 5. Firefighting measures

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#### Suitable extinguishing media

Water spray. Dry powder. Foam. Carbon dioxide.

#### Unsuitable extinguishing media

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

#### Special hazards arising from the substance or mixture

Fire hazard: Product does not burn, fire-extinguishing activities according to surrounding.

Explosion hazard: Product is not explosive.

Hazardous decomposition products in case of fire: Toxic fumes may be released.

#### Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## 6. Accidental release measures

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

General measures: Avoid contact with eyes, skin or mucous membrane. Evacuate the danger area. Evacuate personnel to a safe area.

#### For non-emergency personnel

Emergency procedures: Ventilate spillage area.

### **For emergency responders**

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: „Exposure controls/personal protection“.

### **6.2 Environmental precautions**

Avoid release to the environment.

### **6.3 Methods and material for containment and cleaning up**

Methods for cleaning up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

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

For further information refer to section 13.

## **7. Handling and storage**

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

Additional hazards when processed: Avoid contact with eyes, skin or mucous membrane. Do not breathe vapour/aerosol. Do not breathe dust.

Precautions for safe handling: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions: Store locked up. Store in a well-ventilated place. Keep cool.

Information on mixed storage: Keep away from food, drink and animal feeding stuffs.

Storage area: Store away from direct sunlight or other heat sources. Keep out of frost.

### **7.3 Specific end use(s)**

See Section 1.

## **8. Exposure controls/personal protection**

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### **8.1 Control parameters**

#### **National occupational exposure and biological limit values**

No additional information available

#### **Recommended monitoring procedures**

No additional information available

#### **Air contaminants formed**

No additional information available

#### **DNEL and PNEC**

No additional information available

**Control banding**

No additional information available

**8.2 Exposure controls**

**Appropriate engineering controls**

Ensure good ventilation of the work station.

**Personal protection equipment:**

**Eye protection**



Protective goggles (EN 166)

**Skin and body protection**



Wear suitable protective clothing

**Hand protection**



Chemically resistant protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves, Disposable gloves	Butyl rubber, Chloroprene rubber (CR), Nitrile rubber (NBR)	6 (> 480 minutes)	≥ 0,4		

**Respiratory protection**



In case of inadequate ventilation wear respiratory protection. Breathing apparatus in the event of aerosol or mist formation. Filter type. A-P2

**Thermal hazards**

No additional information available

**Environmental exposure controls**

Avoid release to the environment.

## 9. Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	White
Appearance:	Pasty
Odour:	Almost odourless
Odour threshold:	Not available
Melting point:	Not available
Freezing point:	Not available
Boiling point:	≈ 100 °C
Flammability (solid, gas):	Non flammable.
Explosive properties:	Product is not explosive
Oxidising properties:	Non oxidizing
Explosive limits:	Not available
Lower explosive limit (LEL):	Not available
Upper explosive limit (UEL):	Not available
Flash point:	Not applicable
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
pH:	8 – 8.8
pH solution:	10 % in water
Viscosity, kinematic:	Not available
Solubility:Water:	Miscible
Partition coefficient n-octanol/water (Log Kow):	Not available
Vapour pressure:	Not available
Vapour pressure at 50°C:	Not available
Density:	1.2 – 1.385 g/cm <sup>3</sup> (20 °C)
Relative density:	Not available
Relative vapour density at 20°C:	Not available
Particle characteristics:	Not applicable

### 9.2 Other information

#### Information with regard to physical hazard classes

No additional information available

#### Other safety characteristics

VOC content: < 10 %

## 10. Stability and reactivity

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### 10.1 Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4 Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5 Incompatible materials

Strong acids. Strong bases.

**10.6 Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**11. Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity (oral): Not classified  
 Acute toxicity (dermal): Not classified  
 Acute toxicity (inhalation): Not classified

<b>reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)</b>	
LD50 oral rat	66 mg/kg bodyweight (OECD 401 method)
LD50 Dermal rat	> 1008 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat	2.36 mg/l/4h (OECD 403 method)
<b>Titanium dioxide (13463-67-7)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LD50 oral	5000 mg/kg
<b>Melamine (108-78-1)</b>	
LD50 oral rat	3828 mg/kg
LD50 oral	3161 mg/kg
LC50 Inhalation - Rat	> 5.19 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation))

Skin corrosion/irritation: Not classified  
 pH: 8 – 8.8  
 Serious eye damage/irritation: Not classified  
 pH: 8 – 8.8  
 Respiratory or skin sensitisation: Not classified  
 Germ cell mutagenicity: Not classified  
 Carcinogenicity: Suspected of causing cancer  
 Reproductive toxicity: Suspected of damaging fertility

<b>Melamine (108-78-1)</b>	
NOAEL (animal/male, F0/P)	833 mg/kg
NOAEL (animal/female, F0/P)	1124 mg/kg
NOAEL (animal/male, F1)	89 mg/kg
NOAEL (animal/female, F1)	93 mg/kg

STOT-single exposure: Not classified  
 STOT-repeated exposure: Not classified

<b>reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)</b>	
L (dermal, rat/rabbit, 90 days)	0.525 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EPA OPP 82-3 (Subchronic Dermal Toxicity 90 Days)
<b>Melamine (108-78-1)</b>	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Not classified



**11.2 Information on other hazards**

No additional information available

**12. Ecological information****12.1 Toxicity**

Ecology - general:

Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute):

Not classified

Hazardous to the aquatic environment, long-term (chronic):

Harmful to aquatic life with long lasting effects.

<b>reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)</b>	
LC50 fish 1	0.19 mg/l Oncorhynchus mykiss (Rainbow trout)
LC50 - Fish [2]	0.28 mg/l Lepomis macrochirus (Bluegill)
EC50 Daphnia 1	4.71 mg/l Daphnia magna (Water flea) - (OECD 202 method)
NOEC (chronic)	0.1 mg/l 21 d - Daphnia magna (Water flea)
NOEC chronic fish	0.098 mg/l 28 days - Oncorhynchus mykiss (Rainbow trout) - (OECD 215 method)
<b>Titanium dioxide (13463-67-7)</b>	
EC50 - Other aquatic organisms [1]	> 100 mg/l Test organisms (species):
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	5 mg/l Test organisms (species): Daphnia magna Duration: ,21 d'
<b>Melamine (108-78-1)</b>	
LC50 fish 1	> 3000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 Daphnia 1	200 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	325 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	> 11 mg/l Test organisms (species): Daphnia magna Duration: ,21 d'
NOEC (chronic)	≥ 11 mg/l Test organisms (species): Daphnia magna Duration: ,21 d'
NOEC chronic fish	≥ 5,1 mg/l Test organisms (species): Pimephales promelas Duration: ,36 d'

**12.2 Persistence and degradability**

No additional information available

**12.3 Bioaccumulative potential**

No additional information available

**12.4 Mobility in soil**

No additional information available

**12.5 Results of PBT and vPvB assessment**

No additional information available

**12.6 Endocrine disrupting properties**

No additional information available

**12.7 Other adverse effects**

No additional information available

**13. Disposal considerations****13.1 Waste treatment methods**

Waste treatment methods:

Dispose of contents/container in accordance with licensed collector's sorting instructions.

European List of Waste (LoW) code:

08 01 19\* - aqueous suspensions containing paint or varnish containing organic solvents or other dangerous substances

**14. Transport information**

ADR	IMDG	IATA	ADN	RID
<b>14.1 UN number or ID number</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2 UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3 Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4 Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5 Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

**14.7 Special precautions for user****Overland transport**

Not regulated

**Transport by sea**

Not regulated

**Air transport**

Not regulated

**Inland waterway transport**

Not regulated

**Rail transport**

Not regulated

**14.8 Maritime transport in bulk according to IMO instruments**

Not applicable

## 15. Regulatory information

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### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU-Regulations:

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations  $\geq 0.1$  % or SCL: Melamine (EC 203-615-4, CAS 108-78-1)

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### VOC-Directive (2004/42)

VOC content: < 10 %

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### National regulations:

No additional information available

### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out

## 16. Sonstige Angaben

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#### Datenblatt ausstellender Bereich

Abteilung: Technische Dokumentation

#### Änderungshinweise

Änderungen in Abschnitt 8.1

**Abkürzungen und Akronyme**

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BKF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties
DOT	Department of Transport
TDG	Transportation of Dangerous Goods
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
MARPOL 73/78	MARPOL 73/78: International Convention for the Prevention of Pollution From Ships

ADG	Transport of Australian Dangerous Goods
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**Other information**

Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

**Full text of H- and EUH-statements:**

Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Carc. 2	Carcinogenicity, Category 2
EUH071	Corrosive to the respiratory tract.
EUH208	Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H351	Suspected of causing cancer.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]**

Carc. 2	H351	Calculation method
Repr. 2	H361f	Calculation method

Aquatic Chronic 3	H412	Calculation method
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**Data sheet of issuing area**

Technical documentation