CAS-No.: 7785-20-8 MSDS



# MATERIAL SAFETY DATA SHEET (MSDS)

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

#### **Product identifier**

Product form : Substance

CAS-No. : 7785-20-8 Product code : 01281

 $(NH_4)_2Ni(SO_4)_2$  •  $6H_2O$ Chemical structure

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

#### Uses advised against

No additional information available

#### Details of the supplier of the safety data sheet

Labogens Fine Chem Industries 1st Floor, Above Bank of India, Guru Vihar, Rahon Road, Ludhiana Pb. (141007) +91 9316777775, +91 7707855700

sales@labogens.com - www.Labogens.com

#### 1.4. **Emergency telephone number**

: +91 7707855700 (9:00am - 6:00 pm) **Emergency number** 

### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture 2.1.

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

H302 Acute toxicity (oral),

Category 4

H332 Acute toxicity (inhal.),

Category 4

Respiratory sensitisation, H334

Category 1

Skin sensitisation, H317

Category 1

Germ cell mutagenicity, H341

Category 2 Carcinogenicity

(inhalation) Category 1A

Reproductive toxicity,

H360D Category 1A

H350i

Specific target organ H372

toxicity — Repeated

exposure, Category 1

Hazardous to the aquatic H410

environment — Chronic

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazard, Category 1

Full text of hazard classes and H-statements: see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.1; R49 Repr.Cat.1; R61

T; R23 Xn; R20 Xn; R22 R42 R43 N; R50/53 R48

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP)







GHS07

GHS08

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H302+H332 - Harmful if swallowed or if inhaled

H317 - May cause an allergic skin reaction.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341 - Suspected of causing genetic defects. H350i - May cause cancer by inhalation. H360D - May damage the unborn child.

H372 - Causes damage to organs through prolonged or repeated exposure.

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

Precautionary statements (CLP) : P201 - Obtain special instructions before use.

P260 - Do not breathe vapours, dust, fume, gas.

P273 - Avoid release to the environment.

 $\hbox{P280 - Wear protective gloves, protective clothing, eye protection, face protection.}$ 

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

P261 - Avoid breathing vapours, spray, fume, gas.

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

#### 2.3. Other hazards

No additional information available

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#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Name : AMMONIUM NICKEL SULPHATE HEXAHYDRATE AR

CAS-No. : 7785-20-8

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

#### 3.2. Mixtures

Not applicable

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing. Call a POISON CENTER/doctor.

First-aid measures after skin contact : Wash with plenty of water/.... Get medical advice/attention. Wash contaminated

clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.

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

Symptoms/effects : Causes damage to organs through prolonged or repeated exposure. Suspected of

causing genetic defects.

Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. Harmful if

inhaled. May cause cancer by inhalation.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after ingestion : Harmful if swallowed.

Chronic symptoms : May damage the unborn child.

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

No additional information available

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

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

No additional information available

# 5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory

protection.

# **SECTION 6: Accidental release measures**

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

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Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Very toxic to aquatic life with long lasting effects.

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

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

possible. On land, sweep or shovel into suitable containers.

#### 6.4. Reference to other sections

No additional information available

#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation

in process area to prevent formation of vapour.

Hygiene measures : Do not eat, drink or smoke when using this product. Contaminated work clothing

should not be allowed out of the workplace. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before

eating, drinking or smoking and when leaving work.

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

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

# 7.3. Specific end use(s)

No additional information available

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Hand protection : Protective gloves

Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

#### **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : Green crystalline.

Odour : No data available

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

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Melting point : 85 - 89 °C

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

#### 9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

# 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

No additional information available

#### **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation: Harmful if inhaled.

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Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May

cause an allergic skin reaction.

Germ cell mutagenicity : Suspected of causing genetic defects.

Carcinogenicity : May cause cancer by inhalation.

Reproductive toxicity : May damage the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Potential adverse human health effects

and symptoms

: Harmful if swallowed.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

#### 12.2. Persistence and degradability

AMMONIUM NICKEL SULPHATE HEXAHYDRATE AR (7785-20-8)	
Persistence and degradability	May cause long-term adverse effects in the environment.

## 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. Other adverse effects

No additional information available

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#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations

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

#### **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 3077 UN-No. (IMDG) : 3077 UN-No. (IATA) : 3077 UN-No. (ADN) : 3077 UN-No. (RID) : 3077

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (IATA) : Environmentally hazardous substance, solid, n.o.s.

Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Transport document description (ADR) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III,

(-)

Transport document description (IMDG) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III,

MARINE POLLUTANT

Transport document description (IATA) : UN 3077 Environmentally hazardous substance, solid, n.o.s., 9, III

Transport document description (ADN) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III
Transport document description (RID) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

#### 14.3. Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) : 9
Danger labels (ADR) : 9



#### **IMDG**

Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9



#### **IATA**

Transport hazard class(es) (IATA) : 9
Hazard labels (IATA) : 9

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#### ADN

Transport hazard class(es) (ADN) : 9
Danger labels (ADN) : 9



### RID

Transport hazard class(es) (RID) : 9
Danger labels (RID) : 9



#### 14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

## 14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes

Other information : No supplementary information available

#### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : M7

Special provisions (ADR) : 274, 335, 375, 601

Limited quantities (ADR) : 5kg Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : PP12, B3 Mixed packing provisions (ADR) : MP10

Portable tank and bulk container : T1, BK1, BK2, BK3

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

: TP33

Tank code (ADR) : SGAV, LGBV

Vehicle for tank carriage : AT Transport category (ADR) : 3

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Special provisions for carriage - Packages : V13

(ADR)

Special provisions for carriage - Bulk : VC1, VC2

(ADR)

Special provisions for carriage - Loading, : CV13

unloading and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3077

Tunnel restriction code (ADR) : EAC code : 2Z

- Transport by sea

Special provisions (IMDG) : 274, 335, 966, 967, 969

Limited quantities (IMDG) : 5 kg
Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP02, P002
Special packing provisions (IMDG) : PP12
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3

Tank instructions (IMDG) : BK1, BK2, BK3, T1

Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-F

Stowage category (IMDG) : A

Stowage and handling (IMDG) : SW23

MFAG-No : 171

- Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y956
PCA limited quantity max net quantity : 30kgG

(IATA)

PCA packing instructions (IATA) : 956
PCA max net quantity (IATA) : 400kg
CAO packing instructions (IATA) : 956
CAO max net quantity (IATA) : 400kg

Special provisions (IATA) : A97, A158, A179, A197

ERG code (IATA) : 9L

- Inland waterway transport

Classification code (ADN) : M7

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 kg
Excepted quantities (ADN) : E1
Equipment required (ADN) : PP, A
Number of blue cones/lights (ADN) : 0

Additional requirements/Remarks (ADN) : \* Only in the molten state. \*\* For carriage in bulk see also 7.1.4.1. \*\* \* Only in the

case of transport in bulk.

- Rail transport

Classification code (RID) : M7

Special provisions (RID) : 274, 335, 375, 601

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Excepted quantities (RID) : E1

: P002. IBC08. LP02. R001 Packing instructions (RID)

Special packing provisions (RID) : PP12, B3 Mixed packing provisions (RID) : MP10

Portable tank and bulk container

instructions (RID)

: T1, BK1, BK2, BK3

Portable tank and bulk container special

provisions (RID)

: TP33

Tank codes for RID tanks (RID) : SGAV, LGBV

Transport category (RID) : 3 Special provisions for carriage – Packages : W13

(RID)

Special provisions for carriage - Bulk : VC1, VC2

(RID)

Special provisions for carriage - Loading,

unloading and handling (RID)

: CW13, CW31

Colis express (express parcels) (RID) : CE11 Hazard identification number (RID) : 90

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

Not applicable

#### **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

AMMONIUM NICKEL SULPHATE HEXAHYDRATE AR is not on the REACH Candidate List AMMONIUM NICKEL SULPHATE HEXAHYDRATE AR is not on the REACH Annex XIV List

## 15.1.2. National regulations

#### Germany

Immission Control Act - 12.BImSchV

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### **Netherlands**

SZW-lijst van kankerverwekkende stoffen : The substance is not listed : The substance is not listed SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen -

: The substance is not listed

Vruchtbaarheid

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Ontwikkeling

: The substance is not listed

#### Denmark

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Recommendations Danish Regulation

: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

# 15.2. Chemical safety assessment

No additional information available

#### **SECTION 16: Other information**

#### Full text of R-. H- and FUH-statements:

Acute Tox. 4 (Oral) Acute Tox. 4 (Oral) Aquatic Chronic 1 Aquatic Chronic 1 Hazardous to the aquatic environment — Chronic Hazard, Category 1 Carc. 1A Carcinogenicity (inhalation) Category 1A Muta. 2 Germ cell mutagenicity, Category 2 Repr. 1A Respoductive toxicity, Category 1 Resp. Sens. 1 Respiratory sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, Category 1 STOT RE 1 Specific target organ toxicity — Repeated exposure, Category 1 H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H341 Suspected of causing genetic defects. H350i May cause cancer by inhalation. H360D May damage the unborn child. Causes damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. R20 Harmful if swallowed R22 Harmful if swallowed R23 Toxic by inhalation R42 May cause sensitization by ishin contact R48 Danger of serious damage to health by prolonged exposure R49 May cause cancer by inhalation R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause harm to the unborn child N Dangerous for the environment T Toxic Xn Harmful	Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Chronic 1 Carc. 1A Carcinogenicity (inhalation) Category 1A Muta. 2 Germ cell mutagenicity, Category 2 Repr. 1A Resp. Sens. 1 Respiratory sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, Category 1 Stor RE 1 Specific target organ toxicity — Repeated exposure, Category 1 Hamful if swallowed. H332 Hamful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H341 Suspected of causing genetic defects. H350 May damage the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. R20 Hamful if swallowed R23 Toxic by inhalation R42 May cause sensitization by inhalation R43 May cause sensitization by skin contact R48 Danger of serious damage to health by prolonged exposure R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause harm to the unborn child N Dangerous for the environment T Toxic	,	
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H341 Suspected of causing genetic defects. H350i May cause cancer by inhalation. H360D May damage the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. R20 Harmful by inhalation R22 Harmful if swallowed R23 Toxic by inhalation R42 May cause sensitization by inhalation R43 May cause sensitization by skin contact R48 Danger of serious damage to health by prolonged exposure R49 May cause cancer by inhalation R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause for the environment T Toxic	H332	Harmful if inhaled.
H350i May cause cancer by inhalation. H360D May damage the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. R20 Harmful by inhalation R22 Harmful if swallowed R23 Toxic by inhalation R42 May cause sensitization by inhalation R43 May cause sensitisation by skin contact R48 Danger of serious damage to health by prolonged exposure R49 May cause cancer by inhalation R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause harm to the unborn child N Dangerous for the environment T Toxic	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H360D May damage the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.  R20 Harmful by inhalation R22 Harmful if swallowed R23 Toxic by inhalation R42 May cause sensitization by inhalation R43 May cause sensitization by skin contact R48 Danger of serious damage to health by prolonged exposure R49 May cause cancer by inhalation R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause harm to the unborn child N Dangerous for the environment T Toxic	H341	Suspected of causing genetic defects.
H372 Causes damage to organs through prolonged or repeated exposure.  H410 Very toxic to aquatic life with long lasting effects.  R20 Harmful by inhalation  R22 Harmful if swallowed  R23 Toxic by inhalation  R42 May cause sensitization by inhalation  R43 May cause sensitisation by skin contact  R48 Danger of serious damage to health by prolonged exposure  R49 May cause cancer by inhalation  R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  R61 May cause harm to the unborn child  N Dangerous for the environment  T Toxic	H350i	May cause cancer by inhalation.
H410 Very toxic to aquatic life with long lasting effects.  R20 Harmful by inhalation  R22 Harmful if swallowed  R23 Toxic by inhalation  R42 May cause sensitization by inhalation  R43 May cause sensitisation by skin contact  R48 Danger of serious damage to health by prolonged exposure  R49 May cause cancer by inhalation  R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  R61 May cause harm to the unborn child  N Dangerous for the environment  T Toxic	H360D	May damage the unborn child.
R20 Harmful by inhalation R22 Harmful if swallowed R23 Toxic by inhalation R42 May cause sensitization by inhalation R43 May cause sensitisation by skin contact R48 Danger of serious damage to health by prolonged exposure R49 May cause cancer by inhalation R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause harm to the unborn child N Dangerous for the environment T Toxic	H372	Causes damage to organs through prolonged or repeated exposure.
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R42 May cause sensitization by inhalation R43 May cause sensitisation by skin contact R48 Danger of serious damage to health by prolonged exposure R49 May cause cancer by inhalation R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause harm to the unborn child N Dangerous for the environment T Toxic	R22	Harmful if swallowed
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R48       Danger of serious damage to health by prolonged exposure         R49       May cause cancer by inhalation         R50/53       Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment         R61       May cause harm to the unborn child         N       Dangerous for the environment         T       Toxic	R42	May cause sensitization by inhalation
R49 May cause cancer by inhalation R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R61 May cause harm to the unborn child N Dangerous for the environment T Toxic	R43	May cause sensitisation by skin contact
R50/53  Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  R61  May cause harm to the unborn child  N  Dangerous for the environment  T  Toxic	R48	Danger of serious damage to health by prolonged exposure
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T Toxic	R61	May cause harm to the unborn child
	N	Dangerous for the environment
Xn Harmful	Т	Toxic
	Xn	Harmful

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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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