

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Copper Cement, high grade

Product no.

-

REACH registration number

01-2119474447-29-XXXX (UVCB)

Other means of identification

Intermediate, zinc refining

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

Relevant identified uses of the substance or mixture

Recommended use is refining of metals in industry.

Uses advised against

-

1.3. Details of the supplier of the safety data sheet

Company and addressBoliden Commercial
Box 750
SE-101 35 Stockholm
Sweden

Tel +46 8 610 15 00

Fax +46 8 31 55 45

Contact person**E-mail**

info.market@boliden.com

SDS date

01-06-2015

SDS Version

1.0

1.4. Emergency telephone number

999 (or 111 for non-emergency medical advice). Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department or the NHS enquiry service). See section 16.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Repr. 1A; H360
Muta. 2; H341
Carc. 1A; H350
Eye Dam. 1; H318
Acute. Tox. 4; H302 + H332
STOT RE 2; H373
Aquatic Chronic 1; H410
Aquatic Acute 1; H400

See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

According to EC-Regulation 1907/2006 (REACH)



Signal word

Danger!

Hazard statement(s)

May damage fertility or the unborn child. (H360)
 Suspected of causing genetic defects. (H341)
 May cause cancer. (H350)
 Causes serious eye damage. (H318)
 Harmful if swallowed or if inhaled. (H302 + H332)
 May cause damage to organs through prolonged or repeated exposure. (H373)
 Very toxic to aquatic life with long lasting effects. (H410)

Safety statement(s)	General	-
	Prevention	Avoid release to the environment. (P273). Wear eye protection/protective clothing/protective gloves. (P280).
	Response	Collect spillage. (P391). IF exposed or concerned: Get medical advice/attention. (P308+P313).
	Storage	Store in a well-ventilated place. (P403).
	Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

Copper cement high grade is an UVCB substance, including: Zinc, Cadmium, Chlorine, Nickel, Lead, Arsenic.

2.3. Other hazards

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Additional labelling

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Additional warnings

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VOC

-

SECTION 3: Composition/information on ingredients

3.1. Substances

NAME:	Copper cement, high grade
IDENTIFICATION NOS.:	CAS-no: 67711-88-0 EC-no: 266-964-1 REACH-no: 01-2119474447-29-XXXX
CONTENT:	100%
CLP CLASSIFICATION:	Acute Tox. 4, STOT RE 2, Eye Dam. 1, Muta. 2, Carc. 1A, Repr. 1A, Aquatic Acute 1, Aquatic Chronic 1
	H302, H318, H332, H341, H350, H360, H373, H400, H410

3.2. Mixtures

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other informations

Copper cement high grade is a UVCB substance formed when metallic zinc or other base metals are added to saturated copper containing solutions. Copper and other metals that have more positive standard reduction potential than the base metal is precipitated and the base metal is dissolved to form metal sulfate.

Identified substances include (name (EC/CAS), concentration referring to the substance in its elementary form): Copper (231-159-6/7440-50-8) 10-80%, Zinc (231-175-3/7440-66-6) 5-20%, Cadmium (231-152-8/7440-43-9) 0,1-<3,25%, Iron (231-096-4/7439-89-6) 0,1-10%, Chlorine (215-704-5/1344-67-8) 0,1-10%, Nickel (231-111-4/7440-02-0) 0-<1,0%, Antimony (231-146-5/7440-36-0) 0-5%, Silicon (231-130-8/7440-21-3) 0-3,0%, Lead (231-100-4/7439-92-1) 0,1-2%, Arsenic (231-148-6/7440-38-2) 0-<0,6%, Magnesium

According to EC-Regulation 1907/2006 (REACH)

oxide (215-171-9/1309-48-4) 0-3,0%, Calcium sulphate (231-900-3/7778-18-9) 0-13,9%, Manganese oxide (215-695-8/1344-43-0) 0-2%

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor, if in doubt about the injured person's condition or if the symptoms continue. Never give an unconscious person water or similar.

Inhalation

Remove patient from source of exposure and into fresh air. Keep the person warm and calm. Get medical attention if inhalation of large quantities or if discomfort.

Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Get medical attention, if discomfort continues.

Eye contact

Remove contact lenses. Flush eyes with plenty of water (20-30 °C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Contact a doctor at once.

Ingestion

In the case of ingestion, contact a doctor immediately and take this safety data sheet or the label from the material with you. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down so that no vomit runs back into the mouth and throat. Prevent shock by keeping the injured person warm and calm. Give mouth-to-mouth resuscitation if breathing stops. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

Burns

Rinse with water until the pain stops and continue for 30 minutes.

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

Prolonged inhalation of copper dust may give fibrosis of the lungs, whereas acute exposure leads to irritation of the respiratory system and "metal fume fever".

Metal Fever, caused by zinc oxide dust or fumes in quantities, can occur when welding galvanized metal. Metal fever appears within a few hours after exposure and symptoms are similar to those caused by acute influenza (muscle aches, headache, high body temperature, sweating, etc.).

Ingestion: Primary effect is irritation of the stomach / intestinal system with pain, diarrhea, nausea and stomach cramps as a result.

Skin contact: Solutions and dust of copper compounds may cause eczema or irritation of the skin. Hair can become discoloured.

Reproductive toxicity: This product contains teratogenic substances which can do long-term damage to human offspring. The effects on the child can be: death, deformity, delayed development, and functional disorders.

Carcinogenic effects: This product contains substances which are considered or proven to be carcinogenic. The danger may lie in inhalation, skin contact or ingestion.

Reproductive toxicity: This product contains substances which can do damage to reproductive capacity, e.g. damage to germ cells or hormonal regulation. The effects can be: sterility, reduced fertility, menstruation disorders, etc.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

According to EC-Regulation 1907/2006 (REACH)

5.1. Extinguishing media

The product is not combustible. Use material that is appropriate for the surrounding fire. Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is in close vicinity of fire, toxic heavy metal compounds may form.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from waste material. Avoid direct contact with spilled substances. Keep people and pets away from the contaminated area. It must be ensured that each workstation has adequate ventilation, at work, construction and equipment comply with all legal requirements and that staff use personal protective equipment in accordance with the instructions for protection. See Section 8.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of a leakage to the surroundings, contact the local environmental authorities. Consider putting up waste collecting trays/basins to prevent leakage to the surroundings.

The heavy metals in this product is hazardous to the environment.

6.3. Methods and material for containment and cleaning up

Collect mechanically. Do not flush to sewer. Keep in appropriate containers.

6.4. Reference to other sections

See section 13 with regard to the handling of waste. See section 8 for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Consider putting up waste collecting trays/basins to prevent leakage to the surroundings. See section 8 for information on personal protection. Avoid direct contact with the product.

Care must be taken when using this product. Use the specified protective equipment. Eye wash facilities / showers near the workplace.

Avoid splashes and spills and unnecessary contact. Avoid contact with eyes and skin.

Measures to prevent aerosol and dust generation: If it is technically possible, use local exhaust ventilation.

Extraction of the object is necessary. Use only acid-resistant equipment.

Measures to protect the environment: No special measures are required if the substance is used appropriately.

General occupational hygiene advice: Do not eat, drink or smoke in the work area. Wash hands before eating, smoking etc. Good personal hygiene is important. Frequent change of clothing and daily shower after work. Pregnant women should not handle this product

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original.

Store in a closed container in a well-ventilated place. Store away from oxidizing materials and strong bases.

Storage class: Non flammable solid.

Store in airtight container.

Storage temperature

No data available.

7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

Zinc oxide, fume or respirable dust CAS 1314-13-2
Limit value - Eight hours: 5 mg/m³

According to EC-Regulation 1907/2006 (REACH)

Limit value - Short term: 10 mg/m³

Iron oxide, fume or respirable dust (as Fe) CAS: 1345-25-1

Limit value - Eight hours: 5 mg/m³

Limit value - Short term: 10 mg/m³

Copper, dusts and mists (as Cu) CAS: 7440-50-8

Limit value - Eight hours: 1 mg/m³

Limit value - Short term: 2 mg/m³

Copper, fume, respirable dust CAS: 7440-50-8

Limit value - Eight hours: 0,2 mg/m³

Arsenic & compounds, except arsine (as As) as total dust CAS: 7440-38-2

Limit value - Eight hours: 0.1 mg/m³

Antimony & compounds (as Sb) (except stibine) CAS: 7440-36-0

Limit value - Eight hours: 0.5 mg/m³

Antimony trioxide (as Sb) CAS: 1309-64-4

Limit value - Eight hours: 0,5 mg/m³

Lead and inorganic compounds (as Pb) CAS: 7439-92-1

Limit value - Eight hours: 0,15 mg/m³

Cadmium & cadmium compounds as total dust except CdO fume & CdS pigments (as Cd) CAS 7440-43-9

Limit value - Eight hours 0,025 mg/m³

Nickel, organic compounds (as Ni) CAS 7440-02-0

Limit value - Short term 3 mg/m³

Silicon CAS 7440-21-3

Limit value - Eight hours 10 mg/m³ (inhalable aerosol)

Limit value - Eight hours 4 mg/m³ (respirable aerosol)

Calcium oxide CAS 1305-78-8

Limit value - Eight hours 2 mg/m³

Manganese and inorganic compounds (as Mn) CAS 7439-96-5

Limit value - Eight hours 0,5 mg/m³

Magnesium oxide (as Mg) CAS 1309-48-4

Limit value - Eight hours 4 mg/m³ respirable aerosol

Chlorine

Limit value – Short term 0,5 ppm

Limit value – Short term 1,5 mg/m³

8.1.2 Biological value limits

Biological limits for lead:

Action levels:

Executive the action level. The action levels are:

- in respect of a woman of reproductive capacity, 25 µ g/dl;
- in respect of a young person (aged under 18), 40 µ g/dl;
- in respect of any other employee, 50 µ g/dl.

The suspension levels are:

a blood-level concentration of:

- in respect of a woman of reproductive capacity, 30 µ g/dl;
- in respect of a young person (aged under 18), 50 µ g/dl;
- in respect of any other employee, 60 µ g/dl; or urinary lead concentration of:
- in respect of a woman of reproductive capacity, 25 µ g Pb/g creatinine (14 µ mol/mol creatinine);
- in respect of any other employee, 110 µ g Pb/g creatinine (55 µ mol/mol creatinine).

DNEL / PNEC

No data available.

8.2. Exposure controls

Compliance with the stated exposure limits values should be checked on a regular basis.

General recommendations

Observe general occupational hygiene.

According to EC-Regulation 1907/2006 (REACH)

Eye wash station and safety shower should be available at the work place.

Provide good ventilation when handling dry product (for example, in analyzing the context).

Exposure scenarios

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

Exposure limits

Trade users are covered by the rules of the working environment legislation on maximum concentrations for exposure. See work hygiene threshold values.

Appropriate technical measures

Take ordinary precautions when using the product. Avoid inhalation of gas or dust.

Hygiene measures

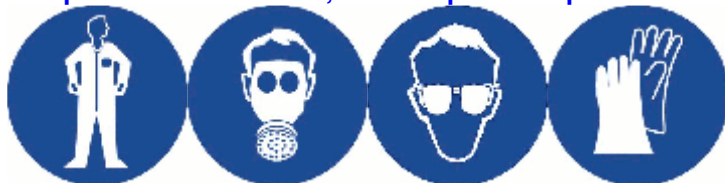
Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible collect spillage during work.

Avoid release to the environment.

Individual protection measures, such as personal protective equipment



Generally

Only CE-marked personal protection equipment should be used.

Respiratory Equipment

Under conditions that generate dust, use respirator P3.

Skin protection

Use suitable protective clothing, pull legs over the bootlegs.

Hand protection

Use protective gloves made of neoprene or nitrile rubber when exposed to the substance. The penetration time of glove material can vary with glove thickness, use and exposure. Make sure the gloves are intact, with no holes or tears.

Eye protection

Use protective glasses with side shields and face protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Colour	Odour	pH	Viscosity	Density (g/cm ³)
Solid powder	Grey-black or dark brown	None	-	Not relevant	3,91

Phase changes

Melting point (°C)	Boiling point (°C)	Vapour pressure (mm Hg)
-	Not relevant	Not relevant

Data on fire and explosion hazards

Flashpoint (°C)	Ignition (°C)	Self ignition (°C)
Not applicable.	-	No auto-inflammability properties
Explosion limits (Vol %)	Oxidizing properties	Flammability
No explosive properties	No oxidation properties, the compound is stable	No flammability properties

Solubility

Solubility in water	n-octanol/water coefficient
Insoluble	Not applicable.

9.2. Other information

Solubility in fat	Additional information
-	Decomposition temperature: 150°C in nitrogen and air.

SECTION 10: Stability and reactivity

According to EC-Regulation 1907/2006 (REACH)

10.1. Reactivity

Finely pulverised copper in contact with chlorates or iodates explode when subjected to heat or shocks. Can react with chlorine, chlorotrifluoride, fluorine, sulphuric acid, potassium dioxide. Sensitive to air. Oxidizes slowly, risk of a limited temperature rise.

10.2. Chemical stability

The product is stable under the conditions noted in section 7.

10.3. Possibility of hazardous reactions

In contact with metals, hydrogen is released and there is a risk of fire and explosion.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Chlorates, iodates, chlorine, chlorotrifluoride, fluorine, sulphuric acid, potassium dioxide, alkalis, acids.

10.6. Hazardous decomposition products

Zinc dust liberates hydrogen gas in contact with oxygen and water. Fire may produce toxic heavy metal compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance	Species	Test	Route of exposure	Result
Cadmium CAS-nr. 7440-43-9	Rat	LD50	Oral	> 2330 mg/kg body weight
Cadmium CAS-nr. 7440-43-9	Rat	LC50	Inhalation 4h	8 mg/l
Zinc CAS-nr. 7440-66-6	Rat	LD50	Oral	> 2000 mg/kg body weight
Zinc CAS-nr. 7440-66-6	Rat	LC50	Inhalation 4h	> 5,41 mg/l
Zinc oxide CAS-nr. 1314-13-2	Rat	LD50	Oral	> 5000 mg/kg body weight
Zinc oxide CAS-nr. 1314-13-2	Rat	LC50	Inhalation 4h	0,4 mg/l
Iron CAS-nr. 7439-89-6	Rat	LD50	Oral	30000 mg/kg body weight

General

The product is classified as toxic because of reproductive characteristics. Constituents are precipitated as metallic compounds, metal sponge and / or alloys. Heavy metals accumulate in the body and the symptoms can arise after long term exposure.

Skin corrosion/irritation

May irritate. May cause sensitization by skin contact. Solutions and dust of copper compounds may cause dermatitis and skin irritation. Hair can be discolored.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation

May cause allergic skin reactions and / or allergy or asthma symptoms or breathing difficulties if inhaled. Inhalation of dusts and fumes containing cadmium, irritate respiratory system. Symptoms may appear some time after exposure and can lead to permanent lung damage and also to death due to lung edema. Prolonged inhalation of copper dust may cause fibriose in the lungs, while acute exposure causes irritation of the respiratory system and "metal fume fever" (A & H 1980:21, A & H 1982:23).

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

May cause cancer (cadmium, nickel).

Reproductive toxicity

May damage fertility or the unborn child.

STOT-single exposure

No data available.

STOT-repeated exposure

May cause damage to organs.

Aspiration hazard

According to EC-Regulation 1907/2006 (REACH)

Normally the product is wet cement that does not dust and therefore represents little risk by inhalation. Inhalation of dust from the dried product is fatal.

Ingestion

May lead to acute or chronic poisoning. May cause vomiting and diarrhea. Primary effect is irritation of the stomach / intestinal system with pain, diarrhea, nausea and stomach cramps as a result. Death can occur within 24 hours as a result of shock or after a few weeks as a result of various effects. The constant exposure to small amounts of cadmium is the kidney the most vulnerable organs.

Long term effects

Accumulate in the body and damage internal organs through prolonged or repeated exposure.

Reproductive toxicity: This product contains teratogenic substances which can do long-term damage to human offspring. The effects on the child can be: death, deformity, delayed development, and functional disorders.

Reproductive toxicity: This product contains substances which can do damage to reproductive capacity, e.g. damage to germ cells or hormonal regulation. The effects can be: sterility, reduced fertility, menstruation disorders, etc.

Carcinogenic effects: This product contains substances which are considered or proven to be carcinogenic. The danger may lie in inhalation, skin contact or ingestion.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Test duration	Result
Cadmium CAS-nr. 7440-43-9	Fish (Oncorhynchus mykiss)	LC50	96h	0,007 mg/l
Cadmium CAS-nr. 7440-43-9	Daphnia	EC50	48h	0,0007 mg/l
Cadmium CAS-nr. 7440-43-9	Algae (Selenastrum capricornutum)	IC50	72h	0,097 mg/l
Zinc CAS-nr. 7440-66-6	Fish	LC50	96h	0.116 mg/l
Zinc CAS-nr. 7440-66-6	Daphnia (Daphnia magna)	EC50	48h	0,068 mg/l
Zinc oxide CAS-nr. 1314-13-2	Fish (Oncorhynchus mykiss)	LC50	96h	1,1 mg/l
Zinc oxide CAS-nr. 1314-13-2	Daphnia (Daphnia magna)	EC50	48h	24,6 mg/l
Copper CAS-nr. 7440-50-8	Fish (Oncorhynchus mykiss)	LC50	96h	0,017 mg/l
Copper CAS-nr. 7440-50-8	Daphnia (hyalina)	EC50	48h	0,0065 mg/l
Copper CAS-nr. 7440-50-8	Algae (Selenastrum capricornutum)	IC50	72h	0,392 mg/l
Lead CAS-nr. 7439-92-1	Fish (Oncorhynchus mykiss)	LC50	96h	0,14 mg/l
Lead CAS-nr. 7439-92-1	Daphnia	EC50	48h	0,1 mg/l
Lead CAS-nr. 7439-92-1	Algae	IC50	72h	0,14 mg/l
Iron CAS-nr. 7439-89-6	Daphnia	EC50	48h	5,2 mg/l
Iron CAS-nr. 7439-89-6	Algae	IC50	72h	0,1 mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
	The heavy metals in the product are persistent organic pollutants. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.		

12.3. Bioaccumulative potential

The heavy metals in the product can accumulate in living organisms.

Substance	Potential bioaccumulation	LogPow	BFC
Cadmium: CAS-nr. 7440-43-9		0	28
Zinc: CAS-nr. 7440-66-6		-	92
Copper: CAS-nr. 7440-50-8		-	29
Lead: CAS-nr. 7439-92-1		-	45
Iron: CAS-nr. 7439-89-6		-	140000

12.4. Mobility in soil

The product is miscible with water.

12.5. Results of PBT and vPvB assessment

The PBT and vPvB criteria do not apply to inorganic substances.

12.6. Other adverse effects

According to EC-Regulation 1907/2006 (REACH)

This product contains ecotoxic substances which can have damaging effects on water-organisms. This product contains substances which can cause undesirable long-term effects in the water environment, due to its poor biodegradability.

Heavy metals in the product are hazardous substances. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

Waste

EWC code

06 03 15, 06 04 05*, 11 01 09, 11 02 02

Specific labelling

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Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

SECTION 14: Transport information

This product is covered by the conventions on dangerous goods.

14.1 – 14.4

ADR/RID

14.1. UN number	3077
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper cement)
14.3. Transport hazard class(es)	9
14.4. Packing group	III
Notes	Danger number: 90
Tunnel restriction code	E

IMDG

UN-no.	3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper cement)
Class	9
PG*	III
EmS	F-A, S-F
MP**	Yes
Hazardous constituent	

IATA/ICAO

UN-no.	3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper cement)
Class	9
PG*	III

14.5. Environmental hazards

Yes

14.6. Special precautions for user

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14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

(*) Packing group

(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

According to EC-Regulation 1907/2006 (REACH)

People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC. Only for industrial use. Pregnant and nursing women must not be exposed to the effects of this product. The risk, and possible technical precautions or design of the workplace to avoid such risk, must therefore be evaluated.

Demands for specific education

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Additional information

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Sources

EC regulation 1907/2006 (REACH)

Directive 2000/532/EC

EC Regulation 1272/2008 (CLP)

EH40/2005

15.2. Chemical safety assessment

Yes

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H302 - Harmful if swallowed.

H318 - Causes serious eye damage.

H332 - Harmful if inhaled.

H341 - Suspected of causing genetic defects.

H350 - May cause cancer.

H360 - May damage fertility or the unborn child.

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.

The full text of identified uses as mentioned in section 1

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Other symbols mentioned in section 2

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Other

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

Emergency numbers

According to EC-Regulation 1907/2006 (REACH)

Austria: Poison Control Centre Emergency helpline +43 1 406 43 43, 112
Belgium: 070 - 245 245
Bulgaria: +359 2 9154 409
Czech Republic: Toxikologické informační středisko Telefon: +420 224 919 293, +420 224 915 402
Denmark: Kontakt Giftlinien på tlf.nr.: 82 12 12 12 (åbent 24 timer i døgnet).
Estonia: 112, 16662, ((+372) 626 93 90)
Finland: 09-4711/Myrkytystietokeskus tai suora numero 09-471977 Myrkytystietokeskus/HUS, Tukholmankatu 17, 00029 HUS (Helsinki) 112
France: ORFILA (INRS) : + 33 (0)1 45 42 59 59. 24 heures sur 24 et 7 jours sur 7
Germany: Giftnotruf Berlin, Emergency telephone: +49 30 19240 (Tag und Nacht)
Greece: +30 10 779 3777
Hungary: Telefon: 06-80-20-11-99
Iceland: Neyðarlínan: Sími 112. Eitrunarmiðstöð Landsspítalans. Sími: 543 2222.
Ireland: +353 1 8379964
Italy: Centro antiveleni di Roma - Policlinico Umberto I tel. 06-49978000
Latvia: +371 704 2468
Lithuania: Visuomenės sveikatos centrams +370 5 236 20 52 arba +370 687 53378
Malta: 2425 0000
Netherlands: 30-2748888
Norway: Giftinformasjonssentralen på tlf.nr.: 22 59 13 00, 113
Poland: +48 58301 65 16 / +48 58 349 2831
Portugal: Em caso de intoxicacao, ligue 808 250 143
Romania: +40 21 3183606
Slovakia: +421 2 54 77 4166
Slovenia: + 386 41 650500
Spain: Servicio de Información Toxicológica Teléfono: + 34 91 562 04 20 (solo emergencias toxicológicas) Información en español (24h/365 días)
Sweden: 112, 08-331231 (vardagar kl 9-17)
United Kingdom: 999 (or 111 for non-emergency medical advice). Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department or the NHS enquiry service)

**Date of last essential change
(First cipher in SDS version)**

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**Date of last minor change
(Last cipher in SDS version)**

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