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

1.1. Product identifier

Mixture identification:

Trade name: MAPEFER 1K ZERO

Trade code: 9027662

UFI: JN56-N03K-900C-31P7

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

Recommended use: Ready prepared cement mortar

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road
Halesowen - West Midlands B62 8HD

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960 - www.mapei.co.uk (office hour 8:30-17:30)

Responsable: sicurezza@mapei.it

1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)333 333 9962

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2	Causes skin irritation.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1B	May cause an allergic skin reaction.
STOT SE 3	May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words

Danger

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Precautionary statements

P261	Avoid breathing dust.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/clothing and eye/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

Contains

portland cement, Cr(VI) < 2 ppm

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards: No other hazards

Prolonged exposition and/or intensive inhalation of respirable free crystalline silica (average diameter less than 10 micron in accordance with ACGIH) can cause pulmonary fibrosis commonly referred to as silicosis.

This preparation contains cement. Contact between cement and body fluids (e.g. sweat and eye fluids) may cause irritation or burns.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: MAPEFER 1K ZERO

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥50 - <75 %	portland cement, Cr(VI) < 2 ppm	CAS:65997-15-1 EC:266-043-4	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Dam. 1, H318; STOT SE 3, H335	
≥0.49 - <1 %	sodium nitrite	CAS:7632-00-0 EC:231-555-9 Index:007-010-00-4	Ox. Sol. 2, H272; Acute Tox. 3, H301; Eye Irrit. 2, H319; Aquatic Acute 1, H400	01-2119471836-27-0000
< 0.00015 %	formaldehyde	CAS:50-00-0 EC:200-001-8 Index:605-001-00-5	Acute Tox. 3, H311 Acute Tox. 3, H331 Acute Tox. 3, H301 Skin Corr. 1B, H314 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 Specific Concentration Limits: 0.2% ≤ C < 100%: Skin Sens. 1 H317 5% ≤ C < 25%: Skin Irrit. 2 H315 5% ≤ C < 25%: Eye Irrit. 2 H319 5% ≤ C < 100%: STOT SE 3 H335 25% ≤ C < 100%: Skin Corr. 1B H314	01-2119488953-20-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations

Scoop into containers and seal for disposal.

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

OEL Type	Country	Occupational Exposure Limit

portland cement, Cr(VI) < 2 ppm CAS: 65997-15-1	National	FINLAND	Long Term: 1 mg/m3 FINLAND, respirabel fraktion
	NDS	POLAND	Long Term: 6 mg/m3 frakcja wdychalna
	NDS	POLAND	Long Term: 2 mg/m3 frakcja respirabilna
	SUVA	SWITZERLAND	Long Term: 5 mg/m3 A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma
	DFG	GERMANY	Long Term: 15 mg/m3
	National	SPAIN	Long Term: 4 mg/m3 5 mg/m3 TWA (containing <1% of free Silica, respirable dust);10 mg/m3 TWA (containing <1% of free Silica, total dust)
	National	PORTUGAL	Long Term: 10 mg/m3
	National	BELGIUM	Long Term: 10 mg/m3
	National	HUNGARY	Long Term: 10 mg/m3
	Malaysia OEL	MALAYSIA	Long Term: 10 mg/m3
	National	UNITED KINGDOM	Long Term: 10 mg/m3 inhalable dust
	National	UNITED KINGDOM	Long Term: 4 mg/m3 respirable dust
	National	CROATIA	Long Term: 10 mg/m3; Short Term: 10 mg/m3
	DFG	GERMANY	Ceiling - Long Term: 15 mg/m3
	ACGIH	AUSTRALIA	Long Term: 1 mg/m3 A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma
	Malaysia OEL	MALAYSIA	Long Term: 10 mg/m3 5 mg/m3 TWA (containing <1% of free Silica, respirable dust);10 mg/m3 TWA (containing <1% of free Silica, total dust)
	National	UNITED KINGDOM	Long Term: 10 mg/m3; Short Term: 30 mg/m3 5 mg/m3 TWA (containing <1% of free Silica, respirable dust);10 mg/m3 TWA (containing <1% of free Silica, total dust)
	National	UNITED KINGDOM	Long Term: 4 mg/m3
	National	ROMANIA	Long Term: 10 mg/m3
	National	CROATIA	Long Term: 4 mg/m3; Short Term: 10 mg/m3
	ACGIH		Long Term: 1 mg/m3 A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma
	National	SPAIN	Long Term: 4 mg/m3
	National	FINLAND	Long Term: 5 mg/m3
	National	FINLAND	Long Term: 1 mg/m3
	National	PORTUGAL	Long Term: 1 mg/m3
	National	BELGIUM	Long Term: 1 mg/m3
	NDS	POLAND	Long Term: 6 mg/m3
	NDS	POLAND	Long Term: 2 mg/m3
	National	LATVIA	Long Term: 6 mg/m3
	National	UNITED KINGDOM	Long Term: 10 mg/m3; Short Term: 30 mg/m3
	National	UNITED KINGDOM	Long Term: 10 mg/m3; Short Term: 12 mg/m3
	National	UNITED KINGDOM	Long Term: 4 mg/m3; Short Term: 30 mg/m3
	National	CROATIA	Long Term: 10 mg/m3

	National	CROATIA	Long Term: 4 mg/m3
sodium nitrite CAS: 7632-00-0	National	LITHUANIA	Ceiling - Short Term: 0.1 mg/m3
formaldehyde CAS: 50-00-0	ACGIH		Ceiling - Short Term: 0.3 ppm DSEN, RSEN, A2 - URT and eye irr
	DFG	GERMANY	Ceiling - Short Term: 0.74 mg/m3 - 0.6 ppm
	ACGIH		Long Term: 0.1 ppm; Short Term: 0.3 ppm A1 - Confirmed Human Carcinogen;eye and upper respiratory tract irritation;upper respiratory tract cancer;dermal sensitizer; respiratory sensitizer
	National	SWEDEN	Long Term: 0.37 mg/m3 - 0.3 ppm
	National	FRANCE	Long Term: 0.5 ppm; Short Term: 1 ppm
	National	SPAIN	Long Term: 0.37 mg/m3 - 0.3 ppm; Short Term: 0.74 mg/m3 - 0.6 ppm
	National	GREECE	Long Term: 2.5 mg/m3 - 2 ppm; Short Term: 2.5 mg/m3 - 2 ppm
	National	DENMARK	Ceiling - Short Term: 0.4 mg/m3 - 0.3 ppm
	National	FINLAND	Long Term: 0.37 mg/m3 - 0.3 ppm
	National	FINLAND	Ceiling - Short Term: 1.2 mg/m3 - 1 ppm
	National	GERMANY	Long Term: 0.37 mg/m3 - 0.3 ppm
	National	NORWAY	Long Term: 0.6 mg/m3 - 0.5 ppm
	National	NORWAY	Ceiling - Short Term: 1.2 mg/m3 - 1 ppm
	NDS	POLAND	Long Term: 0.37 mg/m3
	NDSCh	POLAND	Short Term: 0.74 mg/m3
	CHE	SWITZERLAND	Short Term: 0.74 mg/m3 - 0.6 ppm
	NDS	NETHERLANDS	Long Term: 0.15 mg/m3; Short Term: 0.5 mg/m3
	National	CZECH REPUBLIC	Long Term: 0.5 mg/m3
	National	HUNGARY	Long Term: 0.6 mg/m3; Short Term: 0.6 mg/m3
	Malaysia OEL	MALAYSIA	Ceiling - Short Term: 0.37 mg/m3 - 0.3 ppm
	National	PORTUGAL	Ceiling - Short Term: 0.3 ppm
	National	ESTONIA	Long Term: 0.6 mg/m3 - 0.5 ppm; Short Term: 1.2 mg/m3 - 1 ppm
	National	LATVIA	Long Term: 0.5 mg/m3
	National	CZECH REPUBLIC	Ceiling - Short Term: 1 mg/m3
	National	SLOVAKIA	Ceiling - Short Term: 0.74 mg/m3
	National	SLOVAKIA	Long Term: 0.37 mg/m3 - 0.3 ppm
	National	SLOVENIA	Long Term: 0.62 mg/m3 - 0.5 ppm; Short Term: 0.62 mg/m3 - 0.5 ppm
	National	UNITED KINGDOM	Long Term: 2.5 mg/m3 - 2 ppm; Short Term: 2.5 mg/m3 - 2 ppm
	National	BULGARIA	Long Term: 1 mg/m3; Short Term: 2 mg/m3
	National	ROMANIA	Long Term: 1.2 mg/m3 - 1 ppm; Short Term: 3 mg/m3 - 2 ppm
	National	LITHUANIA	Long Term: 0.6 mg/m3 - 0.5 ppm
	National	LITHUANIA	Ceiling - Short Term: 1.2 mg/m3 - 1 ppm
	National	CROATIA	Long Term: 2.5 mg/m3 - 2 ppm; Short Term: 2.5 mg/m3 - 2 ppm
	EU		Long Term: 0.37 mg/m3 - 0.3 ppm Behaviour Binding

Predicted No Effect Concentration (PNEC) values

sodium nitrite CAS: 7632-00-0	Exposure Route: Fresh Water; PNEC Limit: 0.0054 mg/l
	Exposure Route: Marine water; PNEC Limit: 0.00616 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 0.0195 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 0.0223 mg/kg
formaldehyde	Exposure Route: Fresh Water; PNEC Limit: 0.47 mg/l

CAS: 50-00-0

Exposure Route: Marine water; PNEC Limit: 0.47 mg/l

Exposure Route: Intermittent release; PNEC Limit: 4.7 mg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 0.19 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 2.44 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 2.44 mg/kg

Exposure Route: Soil; PNEC Limit: 0.21 mg/kg

Derived No Effect Level (DNEL) values

sodium nitrite CAS: 7632-00-0	Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects Worker Industry: 2 mg/m3
	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Worker Industry: 2 mg/m3
formaldehyde CAS: 50-00-0	Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects Worker Industry: 1 mg/m3
	Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Industry: 240 mg/kg; Consumer: 102 mg/kg
	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Worker Industry: 9 mg/m3; Consumer: 3.2 mg/m3
	Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects Worker Industry: 0.037 mg/cm2; Consumer: 0.012 mg/cm2
	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects Worker Industry: 0.5 mg/m3; Consumer: 0.1 mg/m3
	Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects Consumer: 4.1 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

Nitrile gloves are suggested (1,3 mm; 480 min). Not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

A dust mask (P2) should be worn if above exposure limits (EN 149)

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid

Appearance: powder

Color: Blue

Odour: cement like

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available

Flammability: N.A.
Lower and upper explosion limit: Not available
Flash point: Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
pH: Not available
pH (water dispersion, 10%): 12.50
Viscosity: Not available
Kinematic viscosity: Not available
Solubility in water: partly soluble
Solubility in oil: insoluble
Partition coefficient (n-octanol/water): Not available
Vapour pressure: Not available
Relative density: Not available
Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available
Conductivity: Not available
Explosive properties: ==
No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Contains cement. Cement gives a strong alkaline reaction with water and body fluids (e.g. sweat and eye fluids), therefore the contact with skin and eyes should be carefully avoided.

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1B(H317)
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: STOT SE 3(H335)
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

sodium nitrite	a) acute toxicity	LD50 Oral Rat = 180 mg/kg
formaldehyde	a) acute toxicity	LD50 Oral Rat = 700 mg/kg LC50 Inhalation Rat = 0.578 mg/l LD50 Skin Rabbit = 270 mg/kg LD50 Skin Rabbit = 270 mg/kg LC50 Inhalation Rat = 0.578 mg/l 4h LD50 Oral Rat = 100 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
sodium nitrite	CAS: 7632-00-0 - EINECS: 231-555-9 - INDEX: 007-010-00-4	a) Aquatic acute toxicity : LC50 Fish > 0.54 mg/L 96h
formaldehyde	CAS: 50-00-0 - EINECS: 200-001-8 - INDEX: 605-001-00-5	a) Aquatic acute toxicity : LC50 Fish = 41 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 42 mg/L 24
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 22.6 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1510 µg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 41 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 0.032 mL/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 100 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23.2 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 2 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 11.3 mg/L 48h EPA

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

Component	Bioaccumulation
sodium nitrite	Not bioaccumulative

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging 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.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable

Road and Rail (ADR-RID):

ADR-Hazard identification number: NA

Not Applicable

Air (IATA):

Not Applicable

Sea (IMDG):

Not Applicable

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

SECTION 15: Regulatory information

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

VOC (2004/42/EC) : N.A. g/l

The product contains Cr (VI) under the limits established by annex. XVII pt.47. Respect the duration according to the information described on the packaging.

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

None

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None.

Restrictions related to the substances contained: 28, 40, 72, 75

SVHC Substances:

SVHC substances not present in a concentration ≥ 0.1% (w/w)

National regulations

Produktregisteret Norge: 110186
Produktregister Danmark: 4368014
MAL-kode: 00-4 (1993)

German Water Hazard Class.

Class 2: hazardous for water.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H311	Toxic 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.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H400	Very toxic to aquatic life.

Code	Hazard class and hazard category	Description
2.14/2	Ox. Sol. 2	Oxidising solid, Category 2
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1

3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.5/2	Muta. 2	Germ cell mutagenicity, Category 2
3.6/1B	Carc. 1B	Carcinogenicity, Category 1B
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.2/2	Calculation method
3.3/1	Calculation method
3.4.2/1B	Calculation method
3.8/3	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.