

SAFETY DATA SHEET

PUREFIX

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

1.1. Product identifier

Trade name

PUREFIX

Product no.

993488

Unique formula identifier (UFI)

XM80-108W-A000-074R

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

Relevant identified uses of the substance or mixture

Paste for cleaning and pickling stainless steel.

Use descriptors (REACH)

Sectors of use	Description
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Process category	Description
PROC10	Roller application or brushing
Environmental release category	Description
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC8b	Wide dispersive indoor use of reactive substances in open systems
ERC8e	Wide dispersive outdoor use of reactive substances in open systems

Uses advised against

The product may only be used on stainless steel.

1.3. Details of the supplier of the safety data sheet

Company and address

Kemitura A/S

Industrivej 9

3540 Lyngø

Denmark

+45 47 17 18 55

E-mail

kemitura@kemitura.com

Revision

09/05/2022

SDS Version

2.0

Date of previous version

10/09/2021 (1.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Met. Corr. 1; H290, May be corrosive to metals.
 Skin Corr. 1A; H314, Causes severe skin burns and eye damage.
 Eye Dam. 1; H318, Causes serious eye damage.
 Acute Tox. 4; H332, Harmful if inhaled.
 STOT SE 3; H335, May cause respiratory irritation.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

May be corrosive to metals. (H290)
 Causes severe skin burns and eye damage. (H314)
 Harmful if inhaled. (H332)
 May cause respiratory irritation. (H335)

Safety statement(s)

General

-

Prevention

Do not breathe vapour. (P260)
 Wear eye protection/protective gloves/protective clothing. (P280)

▼ Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (P303+P361+P353)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing. (P305+P351+P338)
 Immediately call a POISON CENTER/doctor. (P310)

Storage

-

Disposal

-

Hazardous substances

Hydrochloric acid
 Nitric acid

2.3. Other hazards

Additional labelling

EUH071, Corrosive to the respiratory tract.

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: Composition/information on ingredients

▼ 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Hydrochloric acid	CAS No.: 7647-01-0	10-15%	Met. Corr. 1, H290 Skin Corr. 1A, H314	[1]

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

	EC No.: 231-595-7 REACH: 01-2119484862-27 Index No.: 017-002-00-2		Eye Dam. 1, H318 STOT SE 3, H335 (SCL: 10.00 %)	
Silicon dioxide amorphous	CAS No.: 112945-52-5 EC No.: 601-216-3 REACH: 01-2119379499-16-0156 Index No.:	5-10%		[nano]
Nitric acid	CAS No.: 7697-37-2 EC No.: 231-714-2 REACH: 01-2119487297-23 Index No.: 007-004-00-1	5-10%	EUH071 Ox. Liq. 2, H272 Met. Corr. 1, H290 Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1A, H314 Eye Dam. 1, H318 Acute Tox. 3, H331	[1]
Quartz (respirable)	CAS No.: 14808-60-7 EC No.: 238-878-4 REACH: Index No.:	1-3%	STOT RE 1, H372 (Lung) Inhalation(Inhalation)	

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

▼ Other information

[1] European occupational exposure limit
nano: nanoform

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 persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

▼ Ingestion

In the case of ingestion, contact a doctor immediately. 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 to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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 or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Halogenated compounds.

Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate mechanical ventilation with an air change of 10 - 15 times per. hour.

Avoid direct contact with the product.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Store in a container with a resistant inner liner.

Recommended storage material

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

Storage temperature

No specific requirements

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

▼ 8.1. Control parameters

—
Hydrochloric acid

Long term exposure limit (8 hours) (ppm): 1

Long term exposure limit (8 hours) (mg/m³): 2

Short term exposure limit (15 minutes) (ppm): 5

Short term exposure limit (15 minutes) (mg/m³): 8

—
Quartz

Long term exposure limit (8 hours) (mg/m³): 0,1 (respirable fraction)

Annotations:

Carc = Capable of causing cancer and/or heritable genetic damage.

—
Nitric acid

Short term exposure limit (15 minutes) (ppm): 1

Short term exposure limit (15 minutes) (mg/m³): 2,6

—
Quartz (respirable)

Long term exposure limit (8 hours) (mg/m³): 0,1 (respirable fraction)

Annotations:

Carc = Capable of causing cancer and/or heritable genetic damage.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

▼ DNEL

Product/substance	Hydrochloric acid
DNEL	15 mg/m ³
Route of exposure	Inhalation
Duration	Short term – Local effects - Workers

Product/substance	Hydrochloric acid
DNEL	8 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Local effects - Workers

Product/substance	Nitric acid
DNEL	2,6 mg/m ³
Route of exposure	Inhalation

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Duration	Long term – Local effects - Workers
Product/substance	Nitric acid
DNEL	2,6 mg/m ³
Route of exposure	Inhalation
Duration	Short term – Local effects - Workers
Product/substance	Nitric acid
DNEL	1.3 mg/m ³
Route of exposure	Inhalation
Duration	Short term – Local effects - General population
Product/substance	Nitric acid
DNEL	1.3 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Local effects - General population
Product/substance	Nitric acid
DNEL	2.6 mg/m ³
Route of exposure	Inhalation
Duration	Short term – Local effects - Workers
Product/substance	Nitric acid
DNEL	2.6 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Local effects - Workers

PNEC

Product/substance	Hydrochloric acid
PNEC	0,036 mg/L
Route of exposure	Freshwater
Duration of Exposure	
Product/substance	Hydrochloric acid
PNEC	0,036 mg/L
Route of exposure	Marine water
Duration of Exposure	
Product/substance	Hydrochloric acid
PNEC	0,045 mg/L
Route of exposure	Intermittent release
Duration of Exposure	
Product/substance	Hydrochloric acid
PNEC	0,036 mg/L
Route of exposure	Sewage treatment plant
Duration of Exposure	
Product/substance	Hydrochloric acid
PNEC	0,036 mg/L
Route of exposure	Soil

Duration of Exposure

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

Hydrogen and nitric acid exposure scenarios have been implemented in this SDS.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure



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

Individual protection measures, such as personal protective equipment


Generally

Use only CE marked protective equipment.



Respiratory Equipment

Work situation	Type	Class	Colour	Standards	
In the event of prolonged exposure or high concentrations	Air-supplied respirators				
In the event of short termed exposure or low concentrations	Combination Filter A2B2E2K2	Class 2 (medium capacity)	Brown/Gray/Yellow/Green	EN14387	



Skin protection

Recommended	Type/Category	Standards	
Acid-resistant protective clothing	3 / III	EN369, EN14605	



Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Neoprene (Neoprene)	0.5	> 480	EN374-2, EN374-3, EN388	
Fluoropolymer elastomer (e.g. Viton®)	0.4	> 480	EN374-2, EN374-3, EN388	

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Vinyl/PVC	0.5	> 480	EN374-3, EN388, EN511	
Butyl	0.5	> 480	EN374-2, EN374-3, EN388	

Eye protection

Type	Standards	
Wear safety glasses with side shields.	EN166	
In the likelihood of direct or incidental exposure, use face protection.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Paste

Colour

Yellowish

Odour / Odour threshold

Stinging

pH

Ca. 1

▼ Density (g/cm³)

1.1

Kinematic viscosity

No data available

Particle characteristics

Testing not relevant or not possible due to nature of the product.

Phase changes

Melting point/Freezing point (°C)

No data available

Boiling point (°C)

No data available

Vapour pressure

No data available

Relative vapour density

No data available

Decomposition temperature (°C)

No data available

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to nature of the product.

Ignition (°C)

Not applicable

Auto flammability (°C)

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Testing not relevant or not possible due to nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to nature of the product.

Solubility

▼ Solubility in water

Completely soluble

n-octanol/water coefficient

No data available

Solubility in fat (g/L)

No data available

9.2. Other information

Evaporation rate (n-butylacetate = 100)

No data available

▼ Other physical and chemical parameters

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

No special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

▼ Acute toxicity

Product/substance	Hydrochloric acid
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	2222 mg/kg
Other information	

Product/substance	Hydrochloric acid
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	45,6 mg/L
Other information	

Product/substance	Hydrochloric acid
Test method	
Species	Rabbit

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Route of exposure	Dermal
Test	LD50
Result	>5010 mg/kg
Other information	

Product/substance	Hydrochloric acid
Test method	
Species	Rat
Route of exposure	Inhalation
Test	NOAEC
Result	15 mg/m ³
Other information	

Product/substance	Silicon dioxide amorphous
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>5000 mg/kg
Other information	

Product/substance	Quartz
Test method	
Species	
Route of exposure	Dermal
Test	LD50
Result	>2000 mg/kg
Other information	

Product/substance	Nitric acid
Test method	OECD 403
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	> 2,65 mg/L
Other information	

Harmful if inhaled.

Skin corrosion/irritation

Product/substance	Hydrochloric acid
Test method	OECD 404
Species	Rabbit
Duration	
Result	Adverse effect observed (Corrosive)
Other information	

Causes severe skin burns and eye damage.

▼ Serious eye damage/irritation

Product/substance	Hydrochloric acid
Test method	OECD 405
Species	Rabbit
Duration	

Result Adverse effect observed (Causes serious eye damage)
Other information

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Product/substance Hydrochloric acid
Test method
Species Guinea pig
Result No adverse effect observed (not sensitising)
Other information

Germ cell mutagenicity

Product/substance Nitric acid
Test method OECD 471
Species Bacteria
Conclusion No adverse effect observed
Other information

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Product/substance Nitric acid
Test method OECD 422
Species Rat
Duration
Test NOAEL
Result >1500 mg/kg bw/day
Conclusion
Other information

STOT-single exposure

Product/substance Hydrochloric acid
Test method
Species
Route of exposure Inhalation
Target organ Lung
Duration
Test
Result
Conclusion Adverse effect observed
Other information

May cause respiratory irritation.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Endocrine disrupting properties

No special

▼ Other information

Hydrochloric acid has been classified by IARC as a group 3 carcinogen.

Quartz has been classified by IARC as a group 1 carcinogen.

Quartz (respirable) has been classified by IARC as a group 1 carcinogen.

SECTION 12: Ecological information

▼ 12.1. Toxicity

Product/substance	Hydrochloric acid
Test method	
Species	Fish, <i>Lepomis macrochirus</i>
Compartment	
Duration	24 hours
Test	LC50
Result	20,5 mg/L
Other information	

Product/substance	Hydrochloric acid
Test method	OECD 202
Species	Daphnia, <i>Daphnia magna</i>
Compartment	
Duration	48 hours
Test	EC50
Result	0,45 mg/L
Other information	

Product/substance	Hydrochloric acid
Test method	OECD 209
Species	Bacteria
Compartment	
Duration	3 hours
Test	EC50
Result	0,23 mg/L
Other information	

Product/substance	Silicon dioxide amorphous
Test method	
Species	Fish, <i>Brachydanio rerio</i>
Compartment	
Duration	96 hours
Test	LC50
Result	>10000 mg/L
Other information	

Product/substance	Silicon dioxide amorphous
Test method	
Species	Daphnia, <i>Daphnia magna</i>
Compartment	
Duration	24 hours

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Test	EC50
Result	>1000 mg/L
Other information	

Product/substance	Nitric acid
Test method	OECD 203
Species	Fish, <i>Oncorhynchus mykiss</i>
Compartment	
Duration	96 hours
Test	LC50
Result	12,5 mg/L
Other information	

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

Product/substance	Hydrochloric acid
Test method	
Potential bioaccumulation	No
LogPow	No data available
BCF	No data available
Other information	

Product/substance	Nitric acid
Test method	
Potential bioaccumulation	No
LogPow	-0,21
BCF	No data available
Other information	

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

No special

12.7. Other adverse effects

No special

SECTION 13: Disposal considerations

▼ 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 6 - Acute toxicity

HP 8 - Corrosive

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

11 01 05* Pickling acids

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878




Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	UN1760	CORROSIVE LIQUID, N.O.S. (Nitric acid, Hydrochloric acid)	Class: 8 Labels: 8 Classification code: C9 	I	No	Limited quantities: 0 Tunnel restriction code: (E) See below for additional information.
IMDG	UN1760	CORROSIVE LIQUID, N.O.S. (Nitric acid, Hydrochloric acid)	Class: 8 Labels: 8 Classification code: C9 	I	No	Limited quantities: 0 EmS: F-A S-B See below for additional information.
IATA	UN1760	CORROSIVE LIQUID, N.O.S. (Nitric acid, Hydrochloric acid)	Class: 8 Labels: 8 Classification code: C9 	I	No	See below for additional information.

* Packing group

** Environmental hazards

▼ **Additional information**

IMDG / See the Dangerous Goods List, section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements

SEVESO - Categories / dangerous substances

Hydrochloric acid

Regulation on drug precursors

Hydrochloric acid is included (Category 3)

Regulation on explosives precursors

Nitric acid (Annex I)

Additional information

Not applicable

▼ Sources

The Management of Health and Safety at Work Regulations 1999

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Council Regulation (EC) No 273/2004 on drug precursors.

Council Regulation (EC) No 2019/1148 on explosives precursors.

CLP Regulation (EC) No 1272/2008, as retained and amended in UK law.

EC-Regulation 1907/2006 (REACH), as amended by UK REACH Regulations SI 2019/758

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼ Full text of H-phrases as mentioned in section 3

H314, Causes severe skin burns and eye damage.

H272, May intensify fire; oxidiser.

H290, May be corrosive to metals.

H301, Toxic if swallowed.

H311, Toxic in contact with skin.

H314, Causes severe skin burns and eye damage.

H318, Causes serious eye damage.

H331, Toxic if inhaled.

H335, May cause respiratory irritation.

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

The full text of identified uses as mentioned in section 1

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

PROC10 = Roller application or brushing

ERC4 = Industrial use of processing aids in processes and products, not becoming part of articles

ERC8b = Wide dispersive indoor use of reactive substances in open systems

ERC8e = Wide dispersive outdoor use of reactive substances in open systems

▼ Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

▼ Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

▼ The [safety data sheet](#) is validated by

SA

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

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.

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.

Country-language: GB-en