

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006**SODIUM HYDROXIDE PEARLS B**

Version 2.0

Print Date 04.03.2023

Revision date / valid from 20.10.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name	:	SODIUM HYDROXIDE PEARLS B
Substance name	:	sodium hydroxide
Index-No.	:	011-002-00-6
CAS-No.	:	1310-73-2
EC-No.	:	215-185-5
EU REACH-Reg. No.	:	01-2119457892-27-xxxx

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

Use of the Substance/Mixture	:	Identified use: See table in front of appendix for a complete overview of identified uses.
Uses advised against	:	At this moment we have not identified any uses advised against
Remarks	:	Before referring to any Exposure Scenario attached to this Safety Data Sheet please check the grade of the product: the Exposure Scenarios presented are not related to all product grade

1.3. Details of the supplier of the safety data sheet

Company	:	Brenntag N.V. Nijverheidslaan 38 BE 8540 Deerlijk
Telephone	:	+32 (0)56 77 6944
Telefax	:	+32 (0)56 77 5711
E-mail address	:	info@brenntag.be
Responsible/issuing person	:	Master Data Administration
Company	:	Brenntag Nederland B.V. Donker Duyvisweg 44 NL 3316 BM Dordrecht
Telephone	:	+31 (0)78 65 44 944
Telefax	:	+31 (0)78 65 44 919
E-mail address	:	info@brenntag.nl
Responsible/issuing person	:	Master Data Administration

1.4. Emergency telephone number

Emergency telephone	:	Belgium: Antipoison Center - Brussels TEL: +32(0)70 245 245
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SODIUM HYDROXIDE PEARLS B

number

Netherland: National Poisoning Information Center - Bilthoven
TEL: +31(0) 88 755 8000 (Only for the purpose of informing
medical personnel in cases of acute intoxications)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements
Corrosive to metals	Category 1	---	H290
Skin corrosion	Category 1A	---	H314
Serious eye damage	Category 1	---	H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

Human Health : See section 11 for toxicological information.
Physical and chemical hazards : See section 9/10 for physicochemical information.
Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard symbols :



Signal word : Danger

Hazard statements : H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Precautionary statements

Prevention : P260 Do not breathe dust or mist.
P280 Wear protective gloves/ protective clothing/
eye protection/ face protection.

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	P234	Keep only in original packaging.
Response	: P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
	P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Disposal	: P501	Dispose of contents/ container in accordance with the local/regional/international regulations.

Hazardous components which must be listed on the label:

- sodium hydroxide

2.3. Other hazards

The PBT or vPvB criteria of Annex XIII to the REACH Regulation does not apply to inorganic substances.

Ecological information: No information available about endocrine disruption properties for environment.

Toxicological information: No information available about endocrine disruption properties for human health.

Potential for exothermic hazard Aqueous solution reacts strongly alkaline.

SECTION 3: Composition/information on ingredients

3.1. Substances

		Classification (REGULATION (EC) No 1272/2008)		
Hazardous components	Amount [%]	Hazard class / Hazard category	Hazard statements	
sodium hydroxide				
Index-No.	: 011-002-00-6	<= 100	Met. Corr.1	H290
CAS-No.	: 1310-73-2		Skin Corr.1A	H314
EC-No.	: 215-185-5		Eye Dam.1	H318

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Reg. No.

specific concentration limit
Skin Irrit. 2; H315
0,5 - < 2 %
Eye Irrit. 2; H319
0,5 - < 2 %
Skin Corr. 1A; H314
>= 5 %
Skin Corr. 1B; H314
2 - < 5 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

- | | |
|-------------------------|--|
| General advice | : Take off all contaminated clothing immediately. |
| If inhaled | : In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately. |
| In case of skin contact | : Wash off immediately with soap and plenty of water. Call a physician immediately. |
| In case of eye contact | : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible. |
| If swallowed | : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately. |

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

- | | |
|----------|--|
| Symptoms | : See Section 11 for more detailed information on health effects and symptoms. |
| Effects | : Extremely corrosive and destructive to tissue. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. See Section 11 for more detailed information on health effects and symptoms. |

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

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|-----------|--------------------------|
| Treatment | : Treat symptomatically. |
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SECTION 5: Firefighting measures

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5.1. Extinguishing media

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|--------------------------------|---|---|
| Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : | High volume water jet |

5.2. Special hazards arising from the substance or mixture

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|--------------------------------------|---|--|
| Specific hazards during firefighting | : | Forms slippery/greasy layers with water. The product reacts with water and generates heat. |
| Hazardous combustion products | : | The formation of caustic fumes is possible. |

5.3. Advice for firefighters

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|---|---|--|
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit) |
| Specific extinguishing methods | : | Control smoke with water spray. |
| Further advice | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- | | | |
|----------------------|---|---|
| Personal precautions | : | Keep away unprotected persons. Use personal protective equipment. Ensure adequate ventilation. Avoid contact with the skin and the eyes. Do not breathe dust. |
|----------------------|---|---|

6.2. Environmental precautions

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|---------------------------|---|--|
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. |
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6.3. Methods and materials for containment and cleaning up

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|---|---|---|
| Methods and materials for containment and cleaning up | : | Use mechanical handling equipment. Keep in suitable, closed containers for disposal. |
| Further information | : | Treat recovered material as described in the section "Disposal considerations". Danger of slipping if spilled |

6.4. Reference to other sections

- See Section 1 for emergency contact information.
 See Section 8 for information on personal protective equipment.
 See Section 13 for waste treatment information.

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

- Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Use respirator with appropriate filter if vapours or aerosol are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity. Do not breathe dust.
- Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep in an area equipped with alkali resistant flooring. Store in original container. Keep tightly closed in a dry and cool place. Product is hygroscopic.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection. The product is not flammable.
- Further information on storage conditions : Keep tightly closed in a dry and cool place. Keep in a well-ventilated place.
- Advice on common storage : Keep away from food, drink and animal feedingstuffs. Do not store together with acids and ammonium salts. Materials to avoid: Organic peroxides
- Suitable packaging materials : Polyethylene
- Unsuitable packaging materials : , Aluminium, Zinc

7.3. Specific end use(s)

- Specific use(s) : Identified use: See table in front of appendix for a complete overview of identified uses.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contains no substances with occupational exposure limit values.

Component:	sodium hydroxide	CAS-No. 1310-73-2
Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)		

DNEL	
Workers, Long-term - local effects, Inhalation	: 1,0 mg/m ³

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DNEL

Consumers, Long-term - local effects, Inhalation : 1,0 mg/m³

Component:	sodium hydroxide	CAS-No. 1310-73-2
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Predicted No Effect Concentration (PNEC)

No PNEC value was derived. :

Component:	sodium hydroxide	CAS-No. 1310-73-2
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Other Occupational Exposure Limit Values

Belgium. OELs. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1, as amended, Time Weighted Average (TWA):
2 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Personal protective equipment

Respiratory protection

Advice : Required if dust is released
Recommended Filter type:
Particle filter:P2
Particle filter:P3

Hand protection

Advice : The glove material has to be impermeable and resistant to the product / the substance / the preparation.
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
The following materials are suitable:
fluorocarbon rubber
polychloroprene
natural rubber
butyl-rubber
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Protective gloves should be replaced at first signs of wear.

Eye protection

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Advice : Safety goggles
Face-shield

Skin and body protection

Advice : Impervious clothing
Chemical resistant apron

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If the product contaminates rivers and lakes or drains inform
respective authorities.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form	:	No data available
Physical state	:	solid
Colour	:	white
Odour	:	odourless
Odour Threshold	:	No data available
Melting point/range	:	ca. 319 - 322 °C
Boiling point/boiling range	:	1.390 °C (1013 hPa)
Flammability (solid, gas)	:	The product is not flammable.
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Self-Accelerating decomposition temperature (SADT)	:	No data available
pH	:	> 14 (20 °C) Concentration: 100 g/l

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Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Flow time	:	No data available
Solubility(ies)		
Water solubility	:	1000 g/l (25 °C) 3420 g/l (100 °C)
Solubility in other solvents	:	238 g/l(20 °C) Solvent: methanol 139 g/l(20 °C) Solvent: Ethanol
Dissolution Rate	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Dispersion Stability	:	No data available
Vapour pressure	:	ca. 3,5 hPa (800 °C)
Relative density	:	No data available
Density	:	ca. 2,13 g/cm ³ (20 °C)
Bulk density	:	No data available
Relative vapour density	:	Not applicable
Particle characteristics		No data available

9.2 Other information

Explosives	:	Product is not explosive.
Oxidizing properties	:	not oxidising
Flammability (liquids)	:	Not applicable
Metal corrosion rate	:	Corrosive to metals
Evaporation rate	:	Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

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Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Gives off hydrogen by reaction with base metals (zinc, aluminium). Reacts exothermically with water. Reacts exothermic with acids.

10.4. Conditions to avoid

Conditions to avoid : Protect from humidity and keep away from water. Product is hygroscopic. Protect from frost.

Thermal decomposition : No data available

10.5. Incompatible materials

Materials to avoid : Materials to avoid: Acids, Light metals, Water, Alcohols, Strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products : Hydrogen, by reaction with metals

SECTION 11: Toxicological information

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

Data for the product

Acute toxicity

Inhalation

Inhalation may cause pain in respiratory system, sneezing, coughing and difficulty in breathing. Risk for pulmonary edema by high concentration.

Component:

sodium hydroxide

CAS-No. 1310-73-2

Acute toxicity

Oral

No valid data available.

Inhalation

No valid data available.

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Dermal

No valid data available.

Irritation

Skin

Result : Very corrosive (Rabbit) (No guideline followed)

Eyes

Result : corrosive effects (Rabbit; Test substance: 10% solution) (OECD Test Guideline 405) Equivalent or similar to OECD Guideline

Sensitisation

Result : not sensitizing (Human) (No guideline followed) Patch test on human volunteers did not demonstrate sensitisation properties.

CMR effects

CMR Properties

Carcinogenicity : No experimental references for cancerogenity available.
 Mutagenicity : In vitro tests did not show mutagenic effects
 In vivo tests did not show mutagenic effects
 Teratogenicity : No data available
 Reproductive toxicity : Not expected to impair fertility.

Specific Target Organ Toxicity

Single exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

Not applicable,

11.2. Information on other hazards

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Data for the product

Endocrine disrupting properties

Assessment : No information available about endocrine disruption properties for human health.

Component: sodium hydroxide CAS-No. 1310-73-2

Endocrine disrupting properties

Assessment : No information available about endocrine disruption properties for human health.

SECTION 12: Ecological information

12.1. Toxicity

Component: sodium hydroxide CAS-No. 1310-73-2

Acute toxicity

Fish

LC50 : 125 mg/l (Gambusia affinis; 96 h) (No guideline followed)
LC50 : 145 mg/l (Poecilia reticulata; 24 h) (No guideline followed)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 40,4 mg/l (Ceriodaphnia (water flea); 48 h) (No guideline followed)

algae

: No data available

12.2. Persistence and degradability

Component: sodium hydroxide CAS-No. 1310-73-2

Persistence and degradability

Persistence

Result : No data available

Biodegradability

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Result : The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Component:	sodium hydroxide	CAS-No. 1310-73-2
Bioaccumulation		

Result : Does not bioaccumulate.

12.4. Mobility in soil

Component:	sodium hydroxide	CAS-No. 1310-73-2
Mobility		

Water : Good soluble in water.

Air : not volatile

Soil : Low potential for adsorption (based on substance properties).

12.5. Results of PBT and vPvB assessment

Data for the product		
Results of PBT and vPvB assessment		

Result : The PBT or vPvB criteria of Annex XIII to the REACH Regulation does not apply to inorganic substances.

Component:	sodium hydroxide	CAS-No. 1310-73-2
Results of PBT and vPvB assessment		

Result : The PBT or vPvB criteria of Annex XIII to the REACH Regulation does not apply to inorganic substances.

12.6. Endocrine disrupting properties

Data for the product		
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Endocrine disrupting potential : No information available about endocrine disruption properties for environment.

Component:	sodium hydroxide	CAS-No. 1310-73-2
Results of PBT and vPvB assessment		
Endocrine disrupting potential		
: No information available about endocrine disruption properties for environment.		

12.7. Other adverse effects

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Component:	sodium hydroxide	CAS-No. 1310-73-2
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Additional ecological information

Result : Harmful effects to aquatic organisms due to pH-shift.
Neutralization is normally necessary before waste water is discharged into water treatment plants.
Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations.

European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

14.1. UN number

1823

14.2. UN proper shipping name

ADR : SODIUM HYDROXIDE, SOLID
RID : SODIUM HYDROXIDE, SOLID
IMDG : SODIUM HYDROXIDE, SOLID

14.3. Transport hazard class(es)

ADR-Class : 8
(Labels; Classification Code; Hazard Identification Number; Tunnel restriction code) 8; C6; 80; (E)

RID-Class : 8
(Labels; Classification Code; Hazard Identification Number) 8; C6; 80

IMDG-Class : 8
(Labels; EmS) 8; F-A, S-B

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14.4. Packaging group

ADR : II
RID : II
IMDG : II

14.5. Environmental hazards

Environmentally hazardous according to ADR : no
Environmentally hazardous according to RID : no
Marine Pollutant according to IMDG-Code : no

14.6. Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Component:	sodium hydroxide	CAS-No. 1310-73-2
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EU. Chemicals Subject : ; The substance/mixture does not fall under this legislation.
to PIC Procedure:
Regulation 649/2012/EU
on export and import of
dangerous chemicals, as
amended

EU. REACH, Annex XVII, : ; The substance/mixture does not fall under this legislation.
Marketing and Use
Restrictions (Regulation
1907/2006/EC)

EU. Regulation No : EC Number: , 215-185-5; Listed
1451/2007 [Biocides],
Annex I, OJ (L 325)

EU. Regulation No. : Maximum concentration in ready for use preparation: 2 %; Hair
1223/2009 on cosmetic
products, Annex III: List
straightener: General use; See the text of the regulation for
applicable exceptions or provisions.

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of Restricted Substances
in Cosmetic Products

pH < 12,7.; pH adjuster for depilatories; See the text of the regulation for applicable exceptions or provisions.

Maximum concentration in ready for use preparation: 4,5 %;

Hair straightener: Professional use; See the text of the regulation for applicable exceptions or provisions.

pH < 11.; Uses as pH adjuster other than for depilatories; See the text of the regulation for applicable exceptions or provisions.

Maximum concentration in ready for use preparation: 5 %; Nail cuticle solvent; See the text of the regulation for applicable exceptions or provisions.

EU. Directive : ; The substance/mixture does not fall under this legislation.
2012/18/EU (SEVESO
III) on major accident
hazards involving
dangerous substances,
Annex I

Notification status sodium hydroxide:

Regulatory List	Notification	Notification number
EINECS	YES	215-185-5
DSL	YES	
KECI (KR)	YES	97-1-136
KECI (KR)	YES	KE-31487
ENCS (JP)	YES	(1)-410
ISHL (JP)	YES	(1)-410
NZIOC	YES	HSR001547
INSQ	YES	
IECSC	YES	
ONT INV	YES	
TCSI	YES	
PICCS (PH)	YES	
TSCA	YES	
VN INV	YES	
TH INV	YES	2815.11
TH INV	YES	2815.12
TH INV	YES	55-1-01354
PHARM (JP)	YES	
AU AIICL	YES	

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

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II

Full text of H-Statements referred to under sections 2 and 3.

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Full text of the Notes referred to under section 3.

Abbreviations and Acronyms

AU AIICL	Australia. Industrial Chemicals Act (AIIC) List
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances
ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit

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ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
STOT	specific target organ toxicity
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VN INVL	Vietnam. National Chemical Inventory
vPvB	very persistent and very bioaccumulative

Further information

Key literature references and sources for data	:	Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.
Methods used for product classification	:	The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings	:	The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.
Other information	:	<p>The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.</p> <p>The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.</p>

|| Indicates updated section.