SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.6 Revision Date 28.09.2017 Print Date 26.08.2018 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1	Product identifiers Product name :	Sodium perborate monohydrate	
	Product Number : Brand : REACH No. : CAS-No. :	372862 Aldrich A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. 10332-33-9	
1.2	2 Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses :	Laboratory chemicals, Manufacture of substances	
1.3	.3 Details of the supplier of the safety data sheet		
	Company :	Sigma-Aldrich Chemie GmbH Riedstrasse 2 D-89555 STEINHEIM	
	Telephone:Fax:E-mail address:	+49 89-6513-1444 +49 7329-97-2319 eurtechserv@sial.com	
1.4	.4 Emergency telephone number		
	Emergency Phone #	0800 181 7059 (CHEMTREC Deutschland) +49 (0)696 43508409 (CHEMTREC weltweit)	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Oxidizing solids (Category 3), H272 Reproductive toxicity (Category 1B), H360 Acute toxicity, Oral (Category 4), H302 Specific target organ toxicity - single exposure (Category 3), H335 Serious eye damage (Category 1), H318

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 Pictogram



Signal word

Danger

Hazard statement(s)			
H272	May intensify fire; oxidizer.		
H302	Harmful if swallowed.		
H318	Causes serious eye damage.		
H331	Toxic if inhaled.		
H335	May cause respiratory irritation.		
H360	May damage fertility or the unborn child.		
Precautionary statement(s)			
P201	Obtain special instructions before use.		
P220	Keep/Store away from clothing/ combustible materials.		
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.		
P280	Wear protective gloves/ eye protection/ 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.		
P311	Call a POISON CENTER /doctor.		
Supplemental Hazard Statements	none		
Restricted to professional users.			

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula	:	$BNaO_3 \cdot H_2O$
Molecular weight	:	99,81 g/mol
CAS-No.	:	10332-33-9
EC-No.	:	231-556-4

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Sodium peroxometaborate monohydrate Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No. EC-No. Index-No.	10332-33-9 231-556-4 005-017-01-4	Ox. Sol. 3; Repr. 1B; Acute Tox. 3; Acute Tox. 4; STOT SE 3; Eye Dam. 1; Ox. Sol. 3; Acute Tox. 4; Eye Dam. 1; H272, H360, H360, H331, H302, H335, H335, H318, H272, H302, H318 Concentration limits: >= 9 %: Repr. 1B, H360Df; 6,5 - < 9 %: Repr. 1B, H360Df;	

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

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- **4.2** Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- **4.3 Indication of any immediate medical attention and special treatment needed** No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture No data available

5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

- **6.3** Methods and materials for containment and cleaning up Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.

Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.Keep away from heat and sources of ignition. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use

respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	a)	Appearance	Form: powder
	b)	Odour	No data available
	c)	Odour Threshold	No data available
	d)	рН	No data available
	e)	Melting point/freezing point	No data available
	f)	Initial boiling point and boiling range	No data available
	g)	Flash point	Not applicable
	h)	Evaporation rate	No data available
	i)	Flammability (solid, gas)	No data available
	j)	Upper/lower flammability or explosive limits	No data available
	k)	Vapour pressure	No data available
	I)	Vapour density	No data available
	m)	Relative density	No data available
	n)	Water solubility	No data available
	o)	Partition coefficient: n- octanol/water	No data available
	p)	Auto-ignition temperature	No data available
	q)	Decomposition temperature	No data available
	r)	Viscosity	No data available
	s)	Explosive properties	No data available
	t)	Oxidizing properties	The substance or mixture is classified as oxidizing with the category 3.
9.2	Other safety information		

9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability Stable under recommended storage conditions.

- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** No data available

10.5 Incompatible materials

Strong reducing agents, Heavy metal salts

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Borane/boron oxides, Sodium oxides Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

LD50 Intravenous - Cat - 600 mg/kg

Skin corrosion/irritation No data available

Serious eye damage/eye irritation Respiratory or skin sensitisation No data available

Germ cell mutagenicity No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Presumed human reproductive toxicant

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

- 12.1 Toxicity No data available
- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- 12.4 Mobility in soil No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information				
14.1	UN numbe ADR/RID: 3	-	IMDG: 3377	IATA: 3377
14.2	UN proper shipping nameADR/RID:SODIUM PERBORATE MONOHYDRATEIMDG:SODIUM PERBORATE MONOHYDRATEIATA:Sodium perborate monohydrate			
14.3	Transport ADR/RID: {	hazard class(es) 5.1	IMDG: 5.1	IATA: 5.1
14.4	Packaging ADR/RID: I		IMDG: III	IATA: III
14.5	Environmental hazards ADR/RID: no		IMDG Marine pollutant: no	IATA: no
14.6	Special pr No data av	ecautions for user ailable		

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use	
REACH - Restrictions on the manufacture, placing on	: Sodium peroxometaborate
the market and use of certain dangerous substances, preparations and articles (Annex XVII)	monohydrate
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Sodium peroxometaborate monohydrate

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

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

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.

H360	May damage fertility or the unborn child.
H360D	May damage the unborn child.
H360Df	May damage the unborn child. Suspected of damaging fertility.

Further information

Copyright 2016 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigmaaldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.