Printing date 28.02.2024 Version number 1 Revision: 26.02.2024

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

· 1.1 Product identifier

· Trade name: Potassium peroxomonosulfate

· Article number: 178 · CAS Number: 70693-62-8 · EC number:

274-778-7 • Registration number 01-2119485567-22

· 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

· Application of the substance / the mixture Chemical.

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Möller Chemie GmbH & Co. KG

Bürgerkamp 1 D-48565 Steinfurt Tel.: 02551/9340-0 Fax: 02551/9340-60

· Further information obtainable from: Product safety department

· 1.4 Emergency telephone number:

Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS05

GHS07

- · Signal word Danger
- · Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

Printing date 28.02.2024 Version number 1 Revision: 26.02.2024

Trade name: Potassium peroxomonosulfate

(Contd. of page 1)

· Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

- · Results of PBT and vPvB assessment
- · PBT:

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- · CAS No. Description

70693-62-8 Potassium peroxomonosulfate

- · Identification number(s)
- · EC number: 274-778-7

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air, consult doctor in case of complaints.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

sulfur dioxide

(Contd. on page 3)

Printing date 28.02.2024 Version number 1 Revision: 26.02.2024

Trade name: Potassium peroxomonosulfate

(Contd. of page 2)

· 5.3 Advice for firefighters

· Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Avoid contact with eyes and skin

Avoid formation of dust.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to section 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Avoid contact with skin, eyes and clothing.

Thorough dedusting.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in well closed containers, cool and dry.
- Information about storage in one common storage facility:

Store away from metals.

Do not store together with alkalis (caustic solutions).

 $Store\ away\ from\ flammable\ substances.$

· Further information about storage conditions:

Protect from heat and direct sunlight.

Protect from humidity and water.

This product is hygroscopic.

- · Storage class: 8B
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · DNELs

worker:

Systemic effects by inhalation:

Long-term: 280 μg/m³ repeated dose toxicity Acute/Short term: 50 mg/m³ acute toxicity

Systemic effects dermal:

Long term: 20 mg/kg bw/day repeated dose toxicity

Acute/Short term: 80 mg/kg body weight/day acute toxicity

· PNECs

Freshwater 22 µg/L

Intermittent release (freshwater) 10.9 µg/L

Sewage treatment plant (STP) 108 mg/L

Sediment (freshwater) 78.2 µg/kg sediment dw

Sediment (seawater) 7.96 µg/kg sediment dw

(Contd. on page 4)

Printing date 28.02.2024 Version number 1 Revision: 26.02.2024

Trade name: Potassium peroxomonosulfate

(Contd. of page 3)

soil 1 mg/kg soil dw

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · Respiratory protection: In dust formation respiratory protection required.
- · Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Natural rubber, NR

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Colour: White Odourless · Odour: · Odour threshold: Not determined. > 70 °C

Melting point/freezing point:

· Flammability Product is not flammable.

· Lower and upper explosion limit

· Lower: Not determined. · Upper: Not determined. · Flash point: not applicable > 80°C · Decomposition temperature: · pH (30 g/l) at 20 °C 2.1

· Viscosity:

· Kinematic viscosity Not applicable. · Dynamic: Not applicable.

·Solubility

· water at 20 °C: $364 \, g/l$

· Partition coefficient n-octanol/water (log value) Not determined. · Vapour pressure: Not applicable.

· Density and/or relative density

· Density at 20 °C: 2.35 g/cm3 · Relative density Not determined. · Vapour density Not applicable.

(Contd. on page 5)

Printing date 28.02.2024 Version number 1 Revision: 26.02.2024

Trade name: Potassium peroxomonosulfate

(Contd. of page 4)

· Particle characteristics

See section 3.

· 9.2 Other information

· Appearance:

· Form: Crystalline

· Important information on protection of health and environment, and on safety.

· *Ignition temperature:* Not determined.

• Explosive properties: Product does not present an explosion hazard.

Void

Void Void

· Change in condition

· Evaporation rate Not applicable.

· Information with regard to physical hazard classes

Void · Explosives · Flammable gases Void Void · Aerosols Void · Oxidising gases · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void · Self-heating substances and mixtures Void · Substances and mixtures, which emit flammable gases in contact with water Void · Oxidising liquids Void · Oxidising solids Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability

· Organic peroxides

· Corrosive to metals

· Desensitised explosives

· Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

Decomposition starts at > 80 °C

· 10.3 Possibility of hazardous reactions

Reactions with reducing agents.

Reactions with strong alkalis.

Reaction with water.

- · 10.4 Conditions to avoid heat
- · 10.5 Incompatible materials:

Strong bases

Strong acids

Reducing agent

halogen compounds

· 10.6 Hazardous decomposition products:

Sulphur dioxide

Sulphur trioxide (SO3) or SO3-mist

Printing date 28.02.2024 Version number 1 Revision: 26.02.2024

Trade name: Potassium peroxomonosulfate

(Contd. of page 5)

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity

Harmful if swallowed.

· LD/LC50 values relevant for classification:

Oral LD50 500 mg/kg (rat)

 $Dermal\ LD50 > 2000\ mg/kg\ (rat)$

Inhalativ LC50/4 h > 5 mg/l (rat)

· Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes serious eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · 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
- · Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

EC50/48 h: 3.5 mg/l (Daphnia magna)

LC50/96 h: 53 mg/l (Onchorhynchus mykiss)

· 12.2 Persistence and degradability

Inorganic product can not be eliminated from the water by biological purification processes.

- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- **PBT:** The product is not considered to be persistent, bioaccumulating nor toxic (PBT).
- · vPvB: The product is not considered to be persistent or very bioaccumulative (vPvB).
- 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Do not empty into drains.

Disposal according to local regulations.

(Contd. on page 7)

Printing date 28.02.2024 Version number 1 Revision: 26.02.2024

Trade name: Potassium peroxomonosulfate

(Contd. of page 6)

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

14.1 UN number or ID number ADR, IMDG, IATA	UN3260
14.2 UN proper shipping name ADR IMDG, IATA	3260 CORROSIVE SOLID, ACIDIC, INORGANA N.O.S. (pentapotassium bis(peroxymonosulpha bis(sulphate)) CORROSIVE SOLID, ACIDIC, INORGANIC, N.O (pentapotassium bis(peroxymonosulphate)bis(sulphate
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
Class	8 Corrosive substances.
Label	8
14.4 Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Hazard identification number (Kemler code): Segregation groups Stowage Category Segregation Code	Warning: Corrosive substances. 80 (SGG1) Acids B SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
14.7 Maritime transport in bulk according to IM instruments	10 Not applicable.
Transport/Additional information:	11
ADR Limited quantities (LQ) Excepted quantities (EQ)	1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
Tunnel restriction code	E
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
UN "Model Regulation":	UN 3260 CORROSIVE SOLID, ACIDIC, INORGANA N . O . S . (P E N T A P O T A S S I U BIS(PEROXYMONOSULPHATE)BIS(SULPHATE)), 8

Printing date 28.02.2024 Version number 1 Revision: 26.02.2024

Trade name: Potassium peroxomonosulfate

(Contd. of page 7)

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

Substance is not listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

- · Annex II REPORTABLE EXPLOSIVES PRECURSORS Substance is not listed.
- · Regulation (EC) No 273/2004 on drug precursors Substance is not listed.
- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Substance is not listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department
- · Contact: Mrs. Steyer
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

EU