

SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: KLOZUR® SP

Other means of identification

None.

Recommended restrictions

Recommended use: Remediation of contaminated soil and groundwater.

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
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Parsippany, NJ 07054
USA

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E-mail : product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Oxidizing solids Category 3

Health Hazards

Acute toxicity (Oral)	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Respiratory sensitizer	Category 1
Skin sensitizer	Category 1
Specific Target Organ Toxicity - Single Exposure	Category 3 (Respiratory tract irritation.)

Label Elements

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

May intensify fire; oxidizer.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.

Precautionary Statements

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing, strong acids, bases, heavy metal salts and other reducing substances, and combustible materials. Take any precaution to avoid mixing with combustibles. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. [In case of inadequate ventilation] wear respiratory protection.

Response:

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Disodium peroxodisulphate		7775-27-1	>99%
Sodium Sulfate		7757-82-6	<1%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information:	Remove from exposure, lie down. Show this safety data sheet to the doctor in attendance.
Inhalation:	Remove from contaminated area. Apply artificial respiration if not breathing. Get medical attention immediately.
Skin Contact:	Wash skin thoroughly with soap and water.
Eye contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. Get medical attention.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Seek medical attention.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	No data available.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	No data available.
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5. Fire-fighting measures

General Fire Hazards:	Release of oxygen may support combustion. Release of oxygen may support combustion.
Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media:	Dry powder. Dry sand. Water.
Unsuitable extinguishing media:	Carbon dioxide High pressure inert gas, e.g. carbon dioxide jet.
Special hazards arising from the substance or mixture:	No data available.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Use personal protective equipment.

Accidental release measures:

Avoid spreading dust or contaminated materials. Prevent runoff from entering drains, sewers, or streams.

Methods and material for containment and cleaning up:

Pick up with vacuum or absorbent solid, store in closed container for disposal. Avoid dust formation.

Environmental Precautions:

No data available.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):

Use only in well-ventilated areas. Minimize dust generation and accumulation.

Safe handling advice:

Wear appropriate personal protective equipment. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation if fumes or vapors are generated. Handle under inert gas atmosphere in dry equipment.

Contact avoidance measures:

No data available.

Storage

Safe storage conditions:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Do not store near combustible materials. Avoid contamination. Keep away from food and drink. Avoid dust formation.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Disodium peroxodisulphate - as persulfate	TWA	0.1 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2016)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

Use only in well-ventilated areas. Minimize dust generation and accumulation.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Safety goggles

Skin Protection

Hand Protection:

Material: Rubber (natural, latex).Material:
Neoprene.Material: Polyvinyl chloride (PVC).

Skin and Body Protection:

Long sleeved clothing

Respiratory Protection:

Respirator must be worn if exposed to dust. Wear suitable respiratory protection.

Hygiene measures:

Wash promptly if skin becomes contaminated. Provide eyewash station and safety shower.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:

solid

Form:

Crystalline solid

Color:

White

Odor:

Odorless

Odor Threshold:

No data available.

Melting Point:

356 °F/180 °C

Boiling Point:

No data available.

Flammability:

No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:

No data available.

Explosive limit - lower:

No data available.

Flash Point:

No data available.

Autoignition Temperature:

No data available.

Decomposition Temperature:

No data available.

pH:

6 (1 g/l,)

Viscosity

Dynamic viscosity:

No data available.

Kinematic viscosity:

No data available.

Flow Time:

No data available.

Solubility(ies)

Solubility in Water:

580 g/l (77 °F/25 °C)

Solubility (other):

No data available.

Partition coefficient (n-

No data available.

octanol/water):	
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	2.59 g/cm ³
Bulk density:	No data available.
Vapor density (air=1):	No data available.
Particle characteristics	
Particle Size:	< 420 nm
Particle Size Distribution:	No data available.
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available.
Crystallinity:	No data available.
Surface treatment:	No data available.

Other information

Oxidizing properties:	The substance or mixture is classified as oxidizing with the category 3.
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10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Stable under usual application conditions.
Possibility of hazardous reactions:	Breaks down and releases toxic and spontaneously combustible gases when wet
Conditions to avoid:	Heat. Moisture.
Incompatible Materials:	Bases. Halogens and halogenated compounds. Oxidizing agents. Strong reducing agents. Combustible material
Hazardous Decomposition Products:	No data available.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	ATEmix: 929.29 mg/kg

Dermal

Product:	Not classified for acute toxicity based on available data.
Inhalation Product:	Not classified for acute toxicity based on available data.
Repeated dose toxicity Product:	No data available.
Components:	
Disodium peroxodisulphate	NOAEL (Rat(Female, Male), Oral, 90 day): 91 mg/kg LOAEL (Rat(Female, Male), Oral, 90 day): 200 mg/kg
Skin Corrosion/Irritation Product:	No data available.
Components:	
Disodium peroxodisulphate	OECD 404 (Rabbit): Irritating.
Sodium Sulfate	OECD 404 (Rabbit): Not irritating
Serious Eye Damage/Eye Irritation Product:	No data available.
Components:	
Disodium peroxodisulphate	Irritating.
Sodium Sulfate	Not irritating OECD 405 Rabbit:
Respiratory or Skin Sensitization Product:	No data available.
Components:	
Disodium peroxodisulphate	Skin sensitizer, OECD 406 (Guinea Pig): May cause sensitization by skin contact. May cause sensitization by inhalation.
Sodium Sulfate	Maximization Test, OECD 406 (Guinea Pig): Not a skin sensitizer.
Carcinogenicity Product:	No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:	
No carcinogens present or none present in regulated quantities	
ACGIH: US.ACGIH Threshold Limit Values:	
No carcinogens present or none present in regulated quantities	
US. National Toxicology Program (NTP) Report on Carcinogens:	
No carcinogens present or none present in regulated quantities	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:	
No carcinogens present or none present in regulated quantities	
Germ Cell Mutagenicity	
In vitro Product:	No data available.
Components:	
Disodium peroxodisulphate	gene mutation test (OECD 471): negative
Sodium Sulfate	Ames test (OECD 471): negative gene mutation test (OECD 476): negative Chromosomal aberration (OECD 473): negative

In vivo
Product: No data available.

Components:

Disodium peroxodisulphate Micronucleus test (OECD 474) Intraperitoneal (Mouse, Female, Male): negative

Sodium Sulfate Chromosomal aberration Intraperitoneal (Mouse, Female, Male): negative

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Components:

Disodium peroxodisulphate Category 3 with respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Components:

Sodium Sulfate Not applicable

Information on health hazards
Other hazards
Product: No data available.

12. Ecological information
Ecotoxicity:
Acute hazards to the aquatic environment:
Fish
Product: No data available.

Components:

Disodium peroxodisulphate LC 50 (Scophthalmus maximus, 96 h): 107.6 mg/l

Sodium Sulfate LC 50 (Pimephales promelas, 96 h): 7,960 mg/l

Aquatic Invertebrates
Product: No data available.

Components:

Disodium peroxodisulphate EC 50 (Daphnia magna, 48 h): 120 mg/l (analogy)

Sodium Sulfate EC 50 (Daphnia magna, 48 h): 1,776 mg/l

Toxicity to Aquatic Plants
Product: No data available.

Components:

Disodium peroxodisulphate EC 50 (Phaeodactylum tricornutum, 72 h): 320 mg/l (OECD 201) (analogy)

Sodium Sulfate EC 50 (Nitscheria linearis, 120 h): 1,900 mg/l (US-EPA-method)

Toxicity to microorganisms
Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Components:

Sodium Sulfate Lowest Observed Effect Concentration (Ceriodaphnia dubia, 7 d): 1,329 mg/l
 EC 50 (Ceriodaphnia dubia, 7 d): 1,698 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Toxicity to microorganisms

Product: No data available.

Persistence and Degradability
Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Components:

Sodium Sulfate Log Kow: 3.0

Mobility in soil:

Product No data available.

Results of PBT and vPvB assessment:

Product No data available.

Other adverse effects:
Other hazards

Product: No data available.

13. Disposal considerations

Disposal methods: Waste must be disposed of in accordance with federal, state, provincial and local regulations.

Contaminated Packaging: No data available.

14. Transport information
Domestic regulation
49 CFR

UN/ID/NA number : UN 1505

Product name: KLOZUR® SP

Proper shipping name : Sodium persulfate

Class : 5.1

Packing group : III

Labels : 5.1

ERG Code : 140

Marine pollutant : no

International Regulations**IATA-DGR**

UN/ID No. : UN 1505

Proper shipping name : Sodium persulphate

Class : 5.1

Packing group : III

Labels : 5.1

Packing instruction (cargo aircraft) : 563

Packing instruction (passenger aircraft) : 559

IMDG-Code

UN number or ID number : UN 1505

Proper shipping name : SODIUM PERSULPHATE

Class : 5.1

Packing group : III

Labels : 5.1

EmS Code : F-A, S-Q

Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information**US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Oxidizer (liquid, solid or gas), Acute toxicity (any route of exposure), Skin Corrosion or Irritation, Serious eye damage or eye irritation, Respiratory or Skin Sensitization, Specific target organ toxicity (single or repeated exposure)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

Inventory Status:

Canada DSL Inventory List:	On or in compliance with the inventory	
US TSCA Inventory:	On or in compliance with the inventory	Commercial Status: Active

16. Other information, including date of preparation or last revision

Issue Date: 09/06/2022

Version #: 1.1

Further Information: No data available.

Revision Information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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