



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 2 of 12

**Pictograms:**



**Hazard statements**

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

**Precautionary statements**

P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

**2.3. Other hazards**

No data available

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

Sum formula:	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
Molecular weight:	238,11 g/mol

**Hazardous components**

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
7775-27-1	disodium peroxodisulphate	100 %
	231-892-1	01-2119495975-15-XXXX
	Ox. Sol. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3; H272 H302 H315 H319 H334 H317 H335	

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7775-27-1	231-892-1	disodium peroxodisulphate	100 %
	inhalation: LC50 = >= 2,95 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1200 mg/kg		

**Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

Self-protection of the first aider

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 3 of 12

**After inhalation**

Provide fresh air.  
Call a physician immediately.

**After contact with skin**

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.  
Call a physician immediately.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water.  
Call a physician immediately.

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

Cough  
Allergic reactions  
Irritant  
Dyspnoea  
Vomiting  
Gastrointestinal complaints  
Headache

**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**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

no restriction

**5.2. Special hazards arising from the substance or mixture**

Non-combustible solids  
Oxidizing  
Danger of dust explosion.  
Hazardous combustion products  
In case of fire may be liberated: Sulphur oxides

**5.3. Advice for firefighters**

Avoid contact with skin, eyes and clothes.  
In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.  
Use water spray jet to protect personnel and to cool endangered containers.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

Provide adequate ventilation.  
Use personal protection equipment.  
Avoid contact with skin, eyes and clothes.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Natriumperoxodisulfat zur TOC-Analyse

Revision date: 02.12.2022

Product code: 04750

Page 4 of 12

Remove persons to safety.  
Emergency procedures  
Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3. Methods and material for containment and cleaning up

##### For containment

Cover drains.  
Prevent spread over a wide area (e.g. by containment or oil barriers).  
Collect in closed and suitable containers for disposal.  
Take up carefully when dry. Take up dust-free and set down dust-free.

##### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

##### Other information

Provide adequate ventilation.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### 6.4. Reference to other sections

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Handle and open container with care.  
Provide adequate ventilation.  
Avoid contact with skin, eyes and clothes.  
Avoid dust formation. Do not breathe dust.  
Read label before use.

#### Advice on protection against fire and explosion

Keep away from combustible material.  
May intensify fire; oxidiser.

#### Advice on general occupational hygiene

Take off contaminated clothing.  
Wash hands before breaks and after work.  
When using do not eat or drink.

#### Further information on handling

Take off contaminated clothing and wash it before reuse.  
Wash hands before breaks and after work.  
Draw up and observe skin protection programme.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed and dry.  
Store in a place accessible by authorized persons only.

#### Hints on joint storage

Keep away from combustible material.

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 5 of 12

**Further information on storage conditions**

storage temperature +15°C - +25°C

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**7.3. Specific end use(s)**

Laboratory chemicals

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
7775-27-1	Persulphate salts, inorganic; Sodium persulphate	-	0.1		TWA (8 h)	

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
7775-27-1	disodium peroxodisulphate			
Worker DNEL, long-term		inhalation	systemic	2,06 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	590 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	2,06 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	18,2 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	400 mg/kg bw/day
Worker DNEL, long-term		dermal	local	0,102 mg/cm <sup>2</sup>
Worker DNEL, acute		dermal	local	2,248 mg/cm <sup>2</sup>
Consumer DNEL, long-term		inhalation	systemic	1,03 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	295 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	1,03 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	295 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	9,1 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	200 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	0,051 mg/cm <sup>2</sup>
Consumer DNEL, acute		dermal	local	1,124 mg/cm <sup>2</sup>
Consumer DNEL, long-term		oral	systemic	9,1 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	30 mg/kg bw/day

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 6 of 12

**PNEC values**

CAS No	Substance	
Environmental compartment		Value
7775-27-1	disodium peroxodisulphate	
Freshwater		0,076 mg/l
Freshwater (intermittent releases)		0,763 mg/l
Marine water		0,011 mg/l
Freshwater sediment		0,275 mg/kg
Marine sediment		0,04 mg/kg
Micro-organisms in sewage treatment plants (STP)		3,6 mg/l
Soil		0,015 mg/kg

**8.2. Exposure controls**

**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Suitable eye protection: goggles.

**Hand protection**

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L  
Recommended material: NBR (Nitrile rubber) 0,11 mm  
Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L  
Recommended material: NBR (Nitrile rubber) 0,11 mm  
Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>, <) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

**Skin protection**

Wear suitable protective clothing.  
Take off immediately all contaminated clothing.  
Wash hands before breaks and after work.

**Respiratory protection**

Respiratory protection necessary at: dust formation  
Filtering device with filter or ventilator filtering device of type: P2

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 7 of 12

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	solid	
Colour:	white	
Odour:	odourless	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		No data available
Flammability		
Solid/liquid:		No data available
Gas:		not applicable
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		X
Auto-ignition temperature:		No data available
Decomposition temperature:		~180 °C
pH-Value (at 20 °C):		3,5 - 3,8 (100 g/l)
Viscosity / kinematic:		No data available
Water solubility: (at 20 °C)		545 g/L
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density (at 20 °C):		1,2 g/cm <sup>3</sup>
Bulk density:		~1150 kg/m <sup>3</sup>
Relative vapour density:		No data available

**9.2. Other information**

**Information with regard to physical hazard classes**

Explosive properties	
Danger of dust explosion.	
Sustaining combustion:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	not applicable
Oxidizing properties	
The product is: oxidising, Oxidising.	
Oxidizing solids, Category 3	

**Other safety characteristics**

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
:	No data available
Viscosity / dynamic:	No data available
Flow time:	No data available

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 8 of 12

**Further Information**

No data available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Material, oxygen-rich, Oxidising  
Oxidising agent  
Danger of dust explosion.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

Reducing agent, Combustible substance  
Alcohols, Acid  
Base

**10.4. Conditions to avoid**

Heat  
Humidity

**10.5. Incompatible materials**

No data available

**10.6. Hazardous decomposition products**

No data available

**Further information**

No data available

**SECTION 11: Toxicological information**

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

**Toxicokinetics, metabolism and distribution**

No data available

**Acute toxicity**

Harmful if swallowed.  
Pulmonary oedema

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7775-27-1	disodium peroxodisulphate				
	oral	LD50 1200 mg/kg	Rat	Study report (1979)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1991)	EPA OPP 81-2
	inhalation (4 h) dust/mist	LC50 >= 2,95 mg/l	Rat	Study report (1989)	EPA OPP 81-3

**Irritation and corrosivity**

Causes skin irritation.  
Causes serious eye irritation.

**Sensitising effects**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (disodium peroxodisulphate)  
May cause an allergic skin reaction. (disodium peroxodisulphate)

**Carcinogenic/mutagenic/toxic effects for reproduction**



**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 9 of 12

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

**STOT-single exposure**

May cause respiratory irritation. (disodium peroxodisulphate)

**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.

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards**

**Other information**

No data available

**Further information**

Cough  
Allergic reactions  
Irritant  
Dyspnoea  
Vomiting  
Gastrointestinal complaints  
Headache

**SECTION 12: Ecological information**

**12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7775-27-1	disodium peroxodisulphate					
	Acute fish toxicity	LC50 mg/l	76,3	96 h	Oncorhynchus mykiss	Study report (1993) other: FIFRA Guideline 72-1 of the Pesti
	Acute algae toxicity	ErC50	136 mg/l	72 h	Phaeodactylum tricornutum	Study report (1992) OECD Guideline 201
	Acute crustacea toxicity	EC50	120 mg/l	48 h	Daphnia magna	Study report (1993) other: FIFRA Guideline 72-2 of the Pesti

**12.2. Persistence and degradability**

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

**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 does not meet the PBT/vPvB criteria of REACH, annex XIII.

No data available

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 10 of 12

**12.7. Other adverse effects**

Do not allow to enter into surface water or drains.

**Further information**

Avoid release to the environment.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Dispose of waste according to applicable legislation.

Do not mix with other wastes.

Do not empty into drains.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 1505
<b>14.2. UN proper shipping name:</b>	SODIUM PERSULPHATE
<b>14.3. Transport hazard class(es):</b>	5.1
<b>14.4. Packing group:</b>	III
Hazard label:	5.1
Classification code:	O2
Limited quantity:	5 kg
Excepted quantity:	E1
Transport category:	3
Hazard No:	50
Tunnel restriction code:	E

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 1505
<b>14.2. UN proper shipping name:</b>	SODIUM PERSULPHATE
<b>14.3. Transport hazard class(es):</b>	5.1
<b>14.4. Packing group:</b>	III
Hazard label:	5.1
Classification code:	O2
Limited quantity:	5 kg
Excepted quantity:	E1

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	UN 1505
<b>14.2. UN proper shipping name:</b>	SODIUM PERSULPHATE
<b>14.3. Transport hazard class(es):</b>	5.1
<b>14.4. Packing group:</b>	III
Hazard label:	5.1
Special Provisions:	-
Limited quantity:	5 kg
Excepted quantity:	E1
EmS:	F-A, S-Q

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	UN 1505
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**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 11 of 12

<b>14.2. UN proper shipping name:</b>	SODIUM PERSULPHATE	
<b>14.3. Transport hazard class(es):</b>	5.1	
<b>14.4. Packing group:</b>	III	
Hazard label:	5.1	
Special Provisions:	A803	
Limited quantity Passenger:	10 kg	
Passenger LQ:	Y546	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	559	
IATA-max. quantity - Passenger:	25 kg	
IATA-packing instructions - Cargo:	563	
IATA-max. quantity - Cargo:	100 kg	

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Oxidising substances.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information**

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

**EU regulatory information**

Information according to 2012/18/EU (SEVESO III): P8 OXIDISING LIQUIDS AND SOLIDS

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 1.

**Abbreviations and acronyms**

ADR: Accord européen sur le transport 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 Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service  
 LC50: Lethal concentration, 50%  
 LD50: Lethal dose, 50%

**Relevant H and EUH statements (number and full text)**

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Natriumperoxodisulfat zur TOC-Analyse**

Revision date: 02.12.2022

Product code: 04750

Page 12 of 12