

# Reagent 130+R0701

Revision date: 01.06.2023

Product code: 130+R0701

Page 1 of 11

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

## 1.1. Product identifier

Reagent 130+R0701

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

### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

#### Uses advised against

Do not use for private purposes (household).

#### 1.3. Details of the supplier of the safety data sheet

Company name:	AnalytiChem GmbH	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
E-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	
1.4. Emergency telephone	For Hazardous Materials [or Danger	ous Goods] Incidents Spill, Leak, Fire,
number:	Exposure, or Accident Call CHEMTF	REC Day or Night Within USA and Canada:
	1-800-424-9300 Outside USA and C	anada: +1 703-741-5970 (collect calls

#### Further Information

This product is a mixture. REACH Registration Number see section 3.

accepted)

### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

### Regulation (EC) No 1272/2008

Ox. Liq. 3; H272 Resp. Sens. 1; H334 Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

Danger

### 2.2. Label elements

### Regulation (EC) No 1272/2008

Hazard components for labelling disodium peroxodisulphate

Signal word:

Pictograms:



#### Hazard statements

H272	May intensify fire; oxidiser.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.



# Reagent 130+R0701

Revision date: 01.06.2023

Product code: 130+R0701

Page 2 of 11

### **Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220	Keep away from clothing and other combustible materials.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
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**

### 3.2. Mixtures

#### Chemical characterization

Mixtures in aqueous solution

#### Hazardous components

CAS No	Chemical name	Chemical name				
	EC No Index No REACH No					
	Classification (Regulation (EC) No 1272/2008)					
7775-27-1	disodium peroxodisulphate	disodium peroxodisulphate				
	231-892-1 01-2119495975-15					
	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	No Chemical name				
	Specific Conc. Limits, M-factors and ATE					
7775-27-1	231-892-1 disodium peroxodisulphate					
	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

# No data available

After inhalation

Provide fresh air. Call a doctor if you feel unwell.

# After contact with skin

Wash immediately with: Water Take off immediately all contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

# 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.



# Reagent 130+R0701

Revision date: 01.06.2023

Product code: 130+R0701

Page 3 of 11

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

Irritant Allergic reactions

# 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 liquids Oxidizing 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.

### **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. 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.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

# For cleaning up

Clean contaminated articles and floor according to the environmental legislation.



# Reagent 130+R0701

Revision date: 01.06.2023

Product code: 130+R0701

Page 4 of 11

#### 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

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

### Advice on protection against fire and explosion

Keep away from combustible material.

#### 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.

Close containers in such a way to enable internal pressure to escape (e.g. excess pressure valve).

### Hints on joint storage

Keep away from combustible material.

### Further information on storage conditions

Protect against: Light storage temperature: 18°C - 25°C

### 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/m³	fib/cm³	Category	Origin
7775-27-1	Persulphate salts, inorganic; Sodium persulphate	-	0.1		TWA (8 h)	



according to Regulation (EC) No 1907/2006

# Reagent 130+R0701

Revision date: 01.06.2023

Product code: 130+R0701

Page 5 of 11

## **DNEL/DMEL** values

Substance						
	Exposure route	Effect	Value			
disodium peroxodisulphate						
, long-term	inhalation	systemic	2,06 mg/m <sup>3</sup>			
, acute	inhalation	systemic	590 mg/m³			
, long-term	inhalation	local	2,06 mg/m <sup>3</sup>			
, long-term	dermal	systemic	18,2 mg/kg bw/day			
, acute	dermal	systemic	400 mg/kg bw/day			
, long-term	dermal	local	0,102 mg/cm <sup>2</sup>			
, acute	dermal	local	2,248 mg/cm <sup>2</sup>			
EL, long-term	inhalation	systemic	1,03 mg/m <sup>3</sup>			
EL, acute	inhalation	systemic	295 mg/m³			
EL, long-term	inhalation	local	1,03 mg/m <sup>3</sup>			
EL, acute	inhalation	local	295 mg/m³			
EL, long-term	dermal	systemic	9,1 mg/kg bw/day			
EL, acute	dermal	systemic	200 mg/kg bw/day			
Consumer DNEL, long-term		local	0,051 mg/cm <sup>2</sup>			
Consumer DNEL, acute		local	1,124 mg/cm <sup>2</sup>			
EL, long-term	oral	systemic	9,1 mg/kg bw/day			
EL, acute	oral	systemic	30 mg/kg bw/day			
	disodium peroxodisulphate long-term , acute , long-term , long-term , acute , long-term , acute EL, long-term EL, acute EL, long-term EL, acute EL, long-term EL, acute EL, long-term EL, acute EL, long-term EL, acute EL, long-term EL, acute EL, long-term	Image: disodium peroxodisulphate Exposure route   disodium peroxodisulphate inhalation   long-term inhalation   acute inhalation   long-term inhalation   long-term inhalation   long-term dermal   long-term dermal   acute dermal   long-term dermal   acute dermal   long-term inhalation   sacute dermal   long-term inhalation   sacute dermal   L, long-term inhalation   EL, long-term inhalation   EL, long-term dermal   EL, long-term dermal   EL, acute inhalation   EL, long-term dermal   EL, acute dermal   EL, acute dermal   EL, long-term dermal   EL, acute dermal   EL, acute dermal   EL, long-term dermal	Exposure routeEffectdisodium peroxodisulphateinhalationsystemiclong-terminhalationsystemicacuteinhalationlocallong-terminhalationlocallong-termdermalsystemic, long-termdermallocal, acutedermallocal, acutedermallocal, long-termdermallocal, acutedermallocal, acutedermallocalEL, long-terminhalationsystemicEL, acuteinhalationsystemicEL, long-terminhalationlocalEL, acuteinhalationlocalEL, acutedermallocalEL, acutedermalsystemicEL, acutedermalsystemicEL, acutedermalsystemicEL, acutedermallocalEL, long-termoralsystemic			

# **PNEC** values

CAS No	Substance				
Environmenta	al 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 With specification (test according to EN374):

### By long-term hand contact



according to Regulation (EC) No 1907/2006

# Reagent 130+R0701

Revision date: 01.06.2023

Product code: 130+R0701

Page 6 of 11

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).

### 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: aerosol or mist formation

### Environmental exposure controls

Do not allow to enter into surface water or drains.

### **SECTION 9: Physical and chemical properties**

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

Physical state:	Liquid	
Colour:	colourless	
Odour:	odourless	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and		No data available
boiling range:		
Flammability:		No data available
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		х
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		No data available
Viscosity / kinematic:		No data available
Water solubility:		easily soluble
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:		1,022 g/cm³
Bulk density:		No data available
Relative vapour density:		No data available

# 9.2. Other information

### Information with regard to physical hazard classes



according to Regulation (EC) No 1907/2006

#### Reagent 130+R0701 Revision date: 01.06.2023 Product code: 130+R0701 Page 7 of 11 Explosive properties No data available Sustaining combustion: No data available Self-ignition temperature Solid: No data available Gas: No data available Oxidizing properties The product is: oxidising, Oxidising. 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 No data available Pour point: No data available Viscosity / dynamic: No data available Flow time: No data available **Further Information** No data available **SECTION 10: Stability and reactivity** 10.1. Reactivity Oxidizing

# 10.2. Chemical stability

Protect against: Heat Light storage temperature: 18°C - 25°C

## 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

Heat Light

### 10.5. Incompatible materials

No data available

#### 10.6. Hazardous decomposition products

In case of fire may be liberated: SECTION 5: Firefighting measures

### **Further information**

No data available

# **SECTION 11: Toxicological information**

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

### Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

#### Acute toxicity

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



according to Regulation (EC) No 1907/2006

# Reagent 130+R0701

Revision date: 01.06.2023

Product code: 130+R0701

Page 8 of 11

# ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

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

### Irritation and corrosivity

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

#### 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

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.

### Specific effects in experiment on an animal

There are no data available on the mixture itself.

### Additional information on tests

There are no data available on the mixture itself.

### Practical experience

There are no data available on the mixture itself.

# 11.2. Information on other hazards

### Other information

There are no data available on the mixture itself.

#### **Further information**

There are no data available on the mixture itself.

### SECTION 12: Ecological information

### 12.1. Toxicity

There are no data available on the mixture itself.



according to Regulation (EC) No 1907/2006

# Reagent 130+R0701

Revision date: 01.06.2023

Product code: 130+R0701

Page 9 of 11

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		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

There are no data available on the mixture itself.

### 12.4. Mobility in soil

There are no data available on the mixture itself.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. There are no data available on the mixture itself. No data available

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

Avoid release to the environment.

## Further information

Do not allow to enter into surface water or drains.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Send to a hazardous waste incinerator facility under observation of official regulations. 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)

14.1. UN number or ID number:	UN 3216
14.2. UN proper shipping name:	PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.
<u>14.3. Transport hazard class(es):</u>	5.1
14.4. Packing group:	III
Hazard label:	5.1
Classification code:	01
Limited quantity:	5 L



according to Regulation (EC) No 1907/2006

Revision date: 01.06.2023	Reagent 130+R0701 Product code: 130+R0701	Page 10 of 11
	F4	
Excepted quantity:	E1	
Transport category: Hazard No:	3 50	
Tunnel restriction code:	E	
	E	
Inland waterways transport (ADN)		
14.1. UN number or ID number:		
14.2. UN proper shipping name:	PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	
14.3. Transport hazard class(es):	5.1	
14.4. Packing group:		
Hazard label:	5.1	
Classification code:	01	
Limited quantity:	5 L	
Excepted quantity:	E1	
Marine transport (IMDG)		
<u>14.1. UN number or ID number:</u>	UN 3216	
14.2. UN proper shipping name:	PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	
14.3. Transport hazard class(es):	5.1	
14.4. Packing group:	III	
Hazard label:	5.1	
Special Provisions:	-	
Limited quantity:	5 L	
Excepted quantity:	E1	
EmS:	F-A, S-Q	
Segregation group:	heavy metals and their salts (including their organometallic compounds	5)
Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number or ID number:	UN 3216	
14.2. UN proper shipping name:	PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	
14.3. Transport hazard class(es):	5.1	
14.4. Packing group:	III	
Hazard label:	5.1	
Special Provisions:	A803	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y541	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	551	
IATA-max. quantity - Passenger:	2.5 L	
IATA-packing instructions - Cargo:	555	
IATA-max. quantity - Cargo:	30 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	No	
14.6. Special precautions for user		
Warning: Oxidising substances.		
14.7. Maritime transport in bulk according t	o IMO instruments	
not applicable		
SECTION 15: Regulatory information		
45.4 Cofety, health and any incompanial years	lations/legislation specific for the substance or mixture	

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

# EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3



	Reagent 130+R0701	
Revision date: 01.06.2023	Product code: 130+R0701	Page 11 of 11
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 work protection guideline' (94/33/EC).	'juvenile
Water hazard class (D):	1 - slightly hazardous to water	

# **SECTION 16: Other information**

### 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% Ox. Liq: Oxidising liquid Ox. Sol: Oxidising solid Acute Tox: Acute toxicity Skin Irrit: Skin irritation Eye Irrit: Eye irritation Resp. Sens: Respiratory sensitisation Skin Sens: Skin sensitisation STOT SE: Specific target organ toxicity - single exposure

### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Ox. Liq. 3; H272	On basis of test data
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method

### 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.
H335	May cause respiratory irritation.

### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)