

### MATERIAL SAFETY DATA SHEET (MSDS)

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

##### 1.1. Product identifier

Product form	: Substance
	:
EC index no	: 016-061-00-1
EC no	: 231-781-8
CAS No	: 7727-21-1
Product code	: 05420
Chemical structure	: $\begin{array}{c} \text{O} \\ \parallel \\ \text{KO}-\text{S}-\text{O}-\text{O}-\text{S}-\text{OK} \\ \parallel \qquad \parallel \\ \text{O} \qquad \qquad \text{O} \end{array}$
Synonyms	: Potassium peroxodisulfate

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

###### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

###### 1.2.2. Uses advised against

No additional information available

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

SPAN LAB  
UNIT NO. 14, SKY INDUSTRIAL ESTATE, WALIV, VASAI (E)  
401208 Mumbai - INDIA  
PH: +91 9820509929  
[info@spanlab.in](mailto:info@spanlab.in) [www.spanlab.in](http://www.spanlab.in)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Solids, Category 2	H272
Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Sensitisation — Respiratory, category 1	H334
Sensitisation — Skin, category 1	H317

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Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335

Full text of classification categories and H statements : see section 16

### Classification according to Directive 67/548/EEC or 1999/45/EC

O; R8  
Xn; R22  
R42  
Xi; R36/37/38  
R43

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

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 (CLP) :

P220 - Keep/Store away from clothing/.../combustible materials  
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P284 - [In case of inadequate ventilation] wear respiratory 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  
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

## 2.3. Other hazards

No additional information available

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name	: POTASSIUM PERSULPHATE AR
CAS No	: 7727-21-1
EC no	: 231-781-8
EC index no	: 016-061-00-1

Full text of R- and H-phrases: see section 16

#### 3.2. Mixture

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label). If skin irritation or rash occurs:
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ).
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

Fire hazard	: May cause fire or explosion; strong oxidiser.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

#### 5.3. Advice for firefighters

Firefighting instructions	: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment.

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### SECTION 6: Accidental release measures

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

General measures : No naked lights. No smoking.

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Stop release.

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Take any precaution to avoid mixing with combustibles/... Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

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

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep in fireproof place. Keep container tightly closed.

Incompatible materials : Heat sources. combustible materials.

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

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Personal protective equipment : Wear fire/flame resistant/retardant clothing.

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Hand protection	: protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: In case of inadequate ventilation wear respiratory protection

### SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Colour	: White powder.
Odour	: odourless.
Odour threshold	: No data available
pH	: 2.5 - 4.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 100 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: 9.3
Relative density	: No data available
Density	: 2.48 g/cm <sup>3</sup>
Solubility	: Water: 27 g/l at 20 °C - completely soluble
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: May cause fire or explosion; strong oxidiser.
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

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### 10.2. Chemical stability

May cause fire or explosion; strong oxidiser.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Heat. Sparks. Overheating. Open flame.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Oral: Harmful if swallowed.
Skin corrosion/irritation	: Causes skin irritation. pH: 2.5 - 4.5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 2.5 - 4.5
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

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### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...  
Additional information : Hazardous waste due to potential risk of explosion.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR) : 1492  
UN-No. (IMDG) : 1492  
UN-No.(IATA) : 1492  
UN-No.(ADN) : 1492  
UN-No. (RID) : 1492

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : POTASSIUM PERSULPHATE  
Proper Shipping Name (IMDG) : POTASSIUM PERSULPHATE  
Proper Shipping Name (IATA) : POTASSIUM PERSULPHATE  
Proper Shipping Name (ADN) : POTASSIUM PERSULPHATE  
Proper Shipping Name (RID) : POTASSIUM PERSULPHATE  
Transport document description (ADR) : UN 1492 POTASSIUM PERSULPHATE, 5.1, III, (E)  
Transport document description (IMDG) : UN 1492 POTASSIUM PERSULPHATE, 5.1, III  
Transport document description (IATA) : UN 1492 POTASSIUM PERSULPHATE, 5.1, III  
Transport document description (ADN) : UN 1492 POTASSIUM PERSULPHATE, 5.1, III  
Transport document description (RID) : UN 1492 POTASSIUM PERSULPHATE, 5.1, III

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 5.1  
Danger labels (ADR) : 5.1

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### IMDG

Transport hazard class(es) (IMDG) : 5.1

Danger labels (IMDG) : 5.1



### IATA

Transport hazard class(es) (IATA) : 5.1

Hazard labels (IATA) : 5.1



### ADN

Transport hazard class(es) (ADN) : 5.1

Danger labels (ADN) : 5.1



### RID

Transport hazard class(es) (RID) : 5.1

Danger labels (RID) : 5.1



#### 14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

#### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available




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### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR)	: O2
Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T1
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAV
Tank special provisions (ADR)	: TU3
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Bulk (ADR)	: VC1, VC2, AP6, AP7
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV24
Hazard identification number (Kemler No.)	: 50
Orange plates	: 
Tunnel restriction code (ADR)	: E
EAC code	: 1Z

#### - Transport by sea

Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-Q
Stowage category (IMDG)	: A
Segregation (IMDG)	: SG39, SG49
MFAG-No	: 140

#### - Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y546
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 559
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 563
CAO max net quantity (IATA)	: 100kg
ERG code (IATA)	: 5L

#### - Inland waterway transport

Classification code (ADN)	: O2
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Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

### - Rail transport

Classification code (RID)	: O2
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV
Special provisions for RID tanks (RID)	: TU3
Transport category (RID)	: 3
Special provisions for carriage – Bulk (RID)	: VC1, VC2, AP6, AP7
Special provisions for carriage – Loading and unloading (RID)	: CW24
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 50

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

POTASSIUM PERSULPHATE AR is not on the REACH Candidate List

POTASSIUM PERSULPHATE AR is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (Classification according to VwVwS, Annex 2; WGK No 1350)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

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### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Sol. 2	Oxidising Solids, Category 2
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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
R22	Harmful if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
R42	May cause sensitization by inhalation
R43	May cause sensitisation by skin contact
R8	Contact with combustible material may cause fire
O	Oxidising
Xi	Irritant
Xn	Harmful

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*