

According to 29 CFR 1910.1200

# SULFASOL POTASSIUM

Date of issue: July 01, 2012 Revision date: August 01, 2016 Version. 3

### SECTION 1.- IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product form Substance

Substance name Potassium Sulfate

CAS No. 7778-80-5 Formula  $K_2PO_4$ 

**Synonyms** Dipotassium sulfate/dipotassium sulphate/potassium sulphate, anhydrous/sulfate of potash.

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

Use of the substance/mixture Fertilizers

1.3 Details of the supplier of the safety data sheet

Pima Chemicals & Fertilizers, LLC

1370 Nogales, Az.

Tel. 011 52 (662) 182-0559 rgutierrez@quimicapima.com www.quimicapima.com

com

1.4 Emergency telephone number

Química Pima, S.A. de C.V.

Del Cobre 20, Parque Industrial Hermosillo. Hermosillo, Sonora, México. C.P. 83297

Tel. 011 (662) 251-0010 ventas@quimicapima.com

Emergency number CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

#### **SECTION 2.- HAZARD IDENTIFICATION**

#### 2.1. GHS-US classification

Skin irritation 3 H316

Eye damage 2B H320

### 2.2. Label elements

**GHS-US** labelling

Hazard pictograms (GHS-US)

No pictogram applicable

Signal word (GHS-US): Warning

Hazard statement (GHS-US): H316 Causes mild skin irritation.

H320 Causes eye irritation.

**Precautionary statements (GHS-US):** P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing. P264 Wash hands thoroughly after handling.

P281 Use personal protective equipment as required.

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P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.



According to 29 CFR 1910.1200

# SULFASOL POTASSIUM

P337+P313 If eye irritation persists: Get medical advice/attention.

P402+P404 Store in a dry place. Store in a closed container.

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

international regulations.

2.3. Other hazards None to our knowledge.

2.4 Unknown acute toxicity (GHS-US) Not applicable.

## SECTION 3.- COMPOSICION / INFORMATION OF INGREDIENTS

#### 3.1 Substance

Mono-constituent Substance type

Name	Product identifier	%	GHS-US classification
Potassium Sulfate	(CAS No.) 7778-80-5	> 90.00	Skin irritation 3, H316 Eye damage 2B, H320

3.2 Mixture Not applicable

## SECTION 4.- FIRST AID MEASURE

### 4.1. Description of first air measure

First-aid measures

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. general

First-aid measures after

eve contact

First-aid measures after

skin contact

Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

First-aid measures after Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has

inhalation

stopped. Get medical attention.

First-aid measures after

ingestion

If Potassium Sulfate is swallowed, if conscious, give plenty of water. Immediately call a physician.

Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical

Never give anything by mouth to an unconscious person.

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

Symptoms/injuries after

inhalation

AFTER INHALATION OF DUST: Coughing.

attention if irritation persists.

Symptoms/injuries after

skin contact

Slight irritation.

Symptoms/injuries after

eye contact

ON CONTINUOUS EXPOSURE/CONTACT: Redness of the eye tissue. Irritation of the eye tissue.

Symptoms/injuries after

ingestion

AFTER ABSORPTION OF HIGH QUANTITIES: Gastrointestinal complaints. Nausea. Diarrhea.

Irritation of the gastric/intestinal mucosa. Decreased renal function. Disturbances of heart rate.

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation. Respiratory **Chronic symptoms** 

difficulties.

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

Treat symptomatically.



According to 29 CFR 1910.1200

# SULFASOL POTASSIUM

### **SECTION 5.- FIREFIGHTING MEASURES**

5.1. Extinguishing media

Suitable extinguishing media Adapt extinguishing media to the environment.

Unsuitable extinguishing media No unsuitable extinguishing media known.

5.2. Special hazard arising from the substance or mixture

Fire hazard DIRECT FIRE HAZARD. No fire hazard. INDIRECT FIRE HAZARD. No fire hazard.

**Explosion hazard** DIRECT EXPLOSION HAZARD. No direct explosion hazard.

Reactivity

On heating/burning on exposure to temperature rise: release of toxic and corrosive

gases/vapours (sulphur oxides). In molten state: reacts violently with (some) metals.

5.3. Advice for firefighters

Precautionary measures fire

Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to

fire/heat: have neighborhood close doors and windows.

**Firefighting instructions** Dilute toxic gases with water spray.

**Protection during firefighting** Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6.- ACCIDENTAL RELEASE MEASURES

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

### 6.1.1. For non-emergency personnel

Protective equipment Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus.

See" Material-Handling" to select protective clothing.

Emergency procedures

Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames.

Wash contaminated clothes.

Measures in case of dust release

In case of dust production: keep upwind. Dust production: have neighborhood close

doors and windows.

6.1.2. For emergency responders

Protective equipment

Do not attempt to take action without suitable protective equipment. For further

information refer to section 8 Exposure controls/personal protection"

Emergency procedures Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Do not allow product to spread into the environment. Do not discharge into drains or rivers

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

Method for containment Contain released substance, pump into suitable containers. Consult "handling" to select material of

containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.

Prevent dust cloud formation. Scoop solid spill into closing containers. See "Material-handling" for

Methods for cleaning up suitable container materials. Wash down leftovers with plenty of water. Wash clothing and equipment

after handling.

**Other information** Dispose of materials or solid residues at an authorized site.

## 6.4 Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection.



According to 29 CFR 1910.1200

# SULFASOL POTASSIUM

#### SECTION 7.- HANDLING AND STORAGE

7.1. Precautions for safe handling

Comply with the legal requirements. Avoid raising dust. Keep away from naked flames/heat.

Precautions for safe handling

Observe normal hygiene standards. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with

respiratory protection.

Do not drink, eat or smoke in the workplace. Always wash hands after handling the product. Hygiene measures

Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in the original container in a cool, well ventilated place away from incompatible Storage conditions

materials. Keep container closed when not in use.

Incompatible products Strong oxidizing agents. Aluminum.

KEEP SUBSTANCE AWAY FROM: heat sources. **Heat-ignition** 

Store in a dry area. Store at room temperature. Keep container in a well-ventilated place. Meet Storage area

the legal requirements.

SPECIAL REQUIREMENTS: closing. Dry. Correctly labeled. Meet the legal requirements. Special rules on packaging

Secure fragile packaging in solid containers.

SUITABLE MATERIAL: Wood, Glass, MATERIAL TO AVOID: aluminum. Packaging materials

No additional information available. 7.3 Specific end use(s)

#### SECTION 8.- EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

<u> </u>			
Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium sulfate 7778-80-5	Not available	Not available	Not available

### 8.2. Exposure controls

Appropriate engineering controls Ensure good ventilation of the work station. Extraction to remove dust at its source.

Personal protective equipment Dust production: dust mask with filter type P2. Gloves. Safety glasses.

Material for protective clothing GIVE GOOD RESISTANCE: Rubber.

Hand protection Gloves.

Eye protection Safety glasses. In case of dust production: protective goggles.

Skin and body protection Protective clothing.

Respiratory protection Dust production: dust mask with filter type P2.

Avoid release to the environment. **Environmental exposure controls** 

#### SECTION 9.- PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Physical state: Solid. Appearance: Crystalline solid. Powder. Grains.

Odor: Color: Odorless. Colorless to white.

Molecular mass 174.26 g/mol



# According to 29 CFR 1910.1200

# SULFASOL POTASSIUM

Odor threshold No data available

**pH** 2.5 - 5 **pH solution** 5%

Relative evaporation rate (butyl acetate=1)

No data available

Melting point 1067°C

Freezing point Not applicable

Boiling point 1689°C

Flash point

Self ignition temperature

Decomposition temperature

No data available

Flammability (solid, gas)

No data available

Vapor pressure

No data available

Relative vapor density at 20°C

No data available

Relative density

Density/specific gravity

Solubility

2661 kg/m³

Soluble in water.

Water: 11 g/100 ml

Log Pow Not applicable (inorganic substance)

Log KowNo data availableViscosity, kinematicNot applicableViscosity, dynamicNo data availableExplosive propertiesNo data availableOxidizing propertiesNon oxidizing material

Explosive limits Not applicable

9.2 Other information

No additional information available.

### SECTION 10.- STABILITY AND REACTIVITY

10.1 Reactivity

On heating/burning on exposure to temperature rise: release of toxic and corrosive

2.7

gases/vapours (sulphur oxides). In molten state: reacts violently with some metals.

**10.2 Chemical stability** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions** None under normal conditions of use.

**10.4 Conditions to avoid** Heat.

**10.5 Incompatible materials** Strong oxidizing agents. Aluminum

10.6 Hazardous decomposition products

On combustion or on thermal decomposition (pyrolysis) releases: Potassium oxides.

Sulphur oxides.



According to 29 CFR 1910.1200

# SULFASOL POTASSIUM

#### **SECTION 11.-TOXICOLOGICAL INFORMATION**

### 11. 1. Information on toxicological effects

Likely routes of exposure Skin and eyes contact; inhalation; ingestion.

Acute toxicity Not classified

Name	LD <sub>50</sub> oral	LD <sub>50</sub> dermal	LC <sub>50</sub> inhalation
Potassium sulfate	-	-	-

Skin corrosion/irritation

Serious eye damage/irritation

Respiratory or skin sensitization

Not classified

Not classified

Germ cell mutagenicity

Not classified based on available data, the classification criteria are not met.

Carcinogenicity Not classified

Reproductive toxicity

Not classified based on available data, the classification criteria are not met.

Specific target toxicity (single exposure)

Not classified

Specific target toxicity (repeat exposure)

Not classified based on available data, the classification criteria are not met.

Not classified based on available data, the classification criteria are not met.

### **SECTION 12. ECOLOGICAL INFORMATION**

### 12.1 Toxicity

Ecology - General Classification concerning the environment: not applicable.

Ecology - Air Not classified as dangerous for the ozone layer.

Mild water pollutant (surface water). Maximum concentration in drinking water: 250 mg/l (sulfate)

Ecology - Water Slightly harmful to fishes (LC<sub>50</sub> (96h) 100-1000 mg/l). Slightly harmful to invertebrates (*Daphnia*)

 $(EC_{50} (48h): 100 - 1000 \text{ mg/l})$ . Not harmful to algae  $(EC_{50} (72h) > 1000 \text{ mg/l})$ .

### 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 Other adverse effects

**Other information** No known ecological damage caused by this product.

## SECTION 13.- DISPOSAL CONSIDERATIONS

## 13.1. Waste treatment methods

Waste treatment methods Dispose of in accordance with relevant local regulations.

Waste disposal recommendations

Remove waste in accordance with local and/or national regulations. Recycle/reuse.

Precipitate/make insoluble. Remove to an authorized dump (Class I).

Additional information Can be considered as non hazardous waste.



According to 29 CFR 1910.1200

# SULFASOL POTASSIUM

## **SECTION 14.- TRANSPORT INFORMATION**

**14.1.UN number**Not applicable. In accordance with DOT not regulated for transport.

**14.2. UN proper shipping name** Not applicable.

14.3. Additional information

Other information No supplementary information available.

Overland transport No additional information available.

Transport by sea No additional information available.

Air transport No additional information available.

#### **SECTION 15.- REGULATORY INFORMATION**

### 15.1 US Federal regulations

### Potassium sulfate (7778-80-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2 International regulations

#### **CANADA**

### Potassium sulfate (7778-80-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

### **EU-Regulations**

### Potassium sulfate (7778-80-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

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

Not classified.

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified.

### 15.2.2. National regulations

### Potassium sulfate (7778-80-5)

Listed on the AICS (the Australian Inventory of Chemical Substances).

Listed on Inventory of Existing Chemical Substances (IECSC).

Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.

Listed on the Korean ECL (Existing Chemical List) inventory.

Listed on INSQ (Mexican national Inventory of Chemical Substances).

Listed on New Zealand - Inventory of Chemicals (NZIoC).

Listed on Inventory of Chemicals and Chemical Substances (PICCS).

## 15.3 US State regulations

No additional information available.



According to 29 CFR 1910.1200

# SULFASOL POTASSIUM

## **SECTION 16.- OTHER INFORMATION**

NFPA NFPA health hazard 1 NFPA fire hazard 0 NFPA instability hazard 0 NFPA Special hazard

HMIS III Health 1 Flammability 0 Physical 0 Personal Protection E

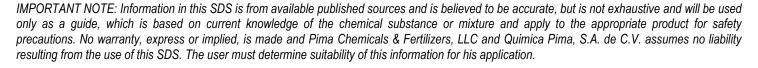
**E** Safety glasses, gloves and dust respirator.

Other information: None.

Made for: Quimica Pima, S.A. de C.V. Del Cobre No. 20 Parque Industrial. Hermosillo, Sonora, México. 83297.

Date of issue: July 01, 2012
Revision date: August 01, 2016

**Revision note:** In this latest revision is updated according to 29 CFR 1910.1200.



End of Safety Data Sheet