

**SECTION 1: Identification**

**1.1. Identification**

Product form : Substance  
 Substance name : 0-0-50-17 (S) Potassium Sulfate  
 CAS No : 7778-80-5  
 Formula : K<sub>2</sub>SO<sub>4</sub>  
 Synonyms : dipotassium sulfate / dipotassium sulphate / granupotasse / potassium sulfate (2:1) / potassium sulfate, anhydrous / potassium sulfate, containing in the dry state more than 52 per cent by weight of K<sub>2</sub>O / potassium sulphate / SOP / sulfate of potash / sulfuric acid, dipotassium salt  
 BIG no : 17764

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

Use of the substance/mixture : Food industry: additive  
 Pharmaceutical product: active ingredient  
 Fertilizer

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

Two Rivers Terminal  
 3300 North Glade Road  
 Pasco, Wa. 99302 - USA  
 T 509-547-7776 - F 509-546-9508  
[www.tworiversterminal.com](http://www.tworiversterminal.com)

**1.4. Emergency telephone number**

Emergency number : 24 Hour Emergency HAZMAT Response: (800) 229-5252; EPA National Response Center (800) 424-8802

**SECTION 2: Hazard(s) identification**

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

**Classification (GHS-US)**

Not classified

**2.2. Label elements**

**GHS-US labeling**

No labeling applicable

**2.3. Other hazards**

No additional information available

**2.4. Unknown acute toxicity (GHS US)**

Not applicable

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

**3.1. Substance**

Name	Product identifier	%	Classification (GHS-US)
0-0-50-17 (S) Potassium Sulfate (Main constituent)	(CAS No) 7778-80-5	100	Not classified

Full text of 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 general : If you feel unwell, seek medical advice.  
 First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.  
 First-aid measures after skin contact : Wash with water and soap. Take victim to a doctor if irritation persists.  
 First-aid measures after eye contact : Rinse with water. Take victim to an ophthalmologist if irritation persists.

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First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Victim is fully conscious: immediately induce vomiting. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)). Consult a doctor/medical service if you feel unwell.

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

Symptoms/injuries after inhalation : AFTER INHALATION OF DUST: Coughing.  
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. Diarrhoea. Irritation of the gastric/intestinal mucosa. Decreased renal function. Disturbances of heart rate.  
Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation. Respiratory difficulties.

### 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 : Adapt extinguishing media to the environment.  
Unsuitable extinguishing media : No unsuitable extinguishing media known.

### 5.2. Special hazards 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 neighbourhood 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 neighbourhood 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".

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.  
Methods for cleaning up : Prevent dust cloud formation. Scoop solid spill into closing containers. See "Material-handling" for 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".

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Comply with the legal requirements. Avoid raising dust. Keep away from naked flames/heat. 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.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions	: Store in a well-ventilated place. Keep cool.
Heat-ignition	: KEEP SUBSTANCE AWAY FROM: heat sources.
Storage area	: Store in a dry area. Store at room temperature. Keep container in a well-ventilated place. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. dry. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	: SUITABLE MATERIAL: wood. glass. MATERIAL TO AVOID: aluminium.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Materials 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 P1. Dust production: dust mask with filter type P3.
Environmental exposure controls	: Avoid release to the environment.

### SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Appearance	: Crystalline solid. Powder. Grains.
Color	: Colourless to white
Odor	: Odourless
Odor threshold	: No data available
pH	: 2.5 - 5
Melting point	: 1067 °C
Freezing point	: Not applicable
Boiling point	: 1689 °C
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: 2.7
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 2661 kg/m <sup>3</sup>
Molecular mass	: 174.26 g/mol
Solubility	: Soluble in water. Water: 11 g/100ml

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Log Pow	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available

### 9.2. Other information

Minimum ignition energy	: Not applicable
SADT	: Not applicable
VOC content	: Not applicable

## SECTION 10: Stability and reactivity

### 10.1. 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.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 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 : Not classified

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LD50 oral rat	6600 mg/kg (Rat)
ATE US (oral)	6600.000 mg/kg body weight

Skin corrosion/irritation	: Not classified pH: 2.5 - 5
Serious eye damage/irritation	: Not classified pH: 2.5 - 5
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: AFTER INHALATION OF DUST: Coughing.
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. Diarrhoea. Irritation of the gastric/intestinal mucosa. Decreased renal function. Disturbances of heart rate.

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

### 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 (Regulation (EC) No 1005/2009). TA-Luft Klasse 5.2.1.  
Ecology - water : Mild water pollutant (surface water). Maximum concentration in drinking water: 250 mg/l (sulfate) (Directive 98/83/EC). Slightly harmful to fishes (LC50(96h) 100-1000 mg/l). Slightly harmful to invertebrates (Daphnia) (EC50 (48h): 100 - 1000 mg/l). Not harmful to algae (EC50 (72h) >1000 mg/l).

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EC50 Daphnia 1	890 mg/l (EC50; 48 h)
LC50 fish 2	653 - 796 mg/l (LC50; 96 h; Lepomis macrochirus)
Threshold limit algae 1	2900 mg/l (EC50; 72 h)

#### 12.2. Persistence and degradability

#### 0-0-51-17 (S) Potassium Sulfate (7778-80-5)

Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

#### 12.3. Bioaccumulative potential

#### 0-0-51-17 (S) Potassium Sulfate (7778-80-5)

Bioaccumulative potential	Not bioaccumulative.
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#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

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 : LWCA (the Netherlands): KGA category 05. Can be considered as non hazardous waste according to Directive 2008/98/EC.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT  
Not regulated for transport

#### TDG

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

No additional information available

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### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

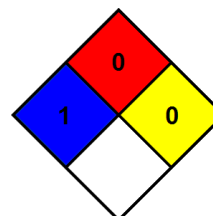
No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

- NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
- NFPA fire hazard : 0 - Materials that will not burn.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012)

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