

**MERCURIC SULFATE****0982**

October 1999

**CAS No: 7783-35-9**  
 RTECS No: OX0500000  
 UN No: 1645  
 EC No: 080-002-00-6

Mercury(II) sulfate  
 Mercuric bisulfate  
 HgSO<sub>4</sub>  
 Molecular mass: 296.7

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: all extinguishing agents allowed.
<b>EXPLOSION</b>			

EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
<b>Inhalation</b>	Sore throat. Cough. Burning sensation. Shortness of breath. Laboured breathing. Weakness.	Local exhaust or breathing protection.	Fresh air, rest. Half-upright position. Refer for medical attention.
<b>Skin</b>	<b>MAY BE ABSORBED!</b> Redness. Pain. Burning sensation. Skin burns. Blisters.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
<b>Eyes</b>	Redness. Pain. Blurred vision. Severe deep burns.	Face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	Abdominal pain. Nausea. Vomiting. Diarrhoea. Metallic taste. Burning sensation. Shock or collapse.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into containers. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: chemical protection suit including self-contained breathing apparatus).	T+ Symbol N Symbol R: 26/27/28-33-50/53 S: (1/2-)13-28-45-60-61 Note: A UN Hazard Class: 6.1 UN Pack Group: II Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Severe marine pollutant.

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-61G64b	Separated from food and feedstuffs. Dry. Keep in the dark.

### IMPORTANT DATA

**Physical State; Appearance**

WHITE CRYSTALLINE POWDER.

**Chemical dangers**

The substance decomposes under the influence of light and on heating to 450°C producing very toxic fumes of mercury and sulfur oxides. The solution in water is a medium strong acid. Reacts with hydrogen halides.

**Occupational exposure limits**

TLV (as Hg): 0.025 mg/m<sup>3</sup> (skin, A4) (ACGIH 1999).

**Routes of exposure**

The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

**Inhalation risk**

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

**Effects of short-term exposure**

The substance is corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion. The substance may cause effects on the gastrointestinal tract and kidneys, resulting in tissue lesions and kidney damage. Medical observation is indicated.

**Effects of long-term or repeated exposure**

The substance may have effects on the kidneys, central nervous system and peripheral nervous system, resulting in ataxia, sensory and memory disturbances, tremors, muscle weakness and kidney impairment.

### PHYSICAL PROPERTIES

Decomposes below melting point at 450°C  
Density: 6.5 g/cm<sup>3</sup>

Solubility in water: reaction  
Auto-ignition temperature: >450°C

### ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. In the food chain important to humans, bioaccumulation takes place, specifically in aquatic organisms. The substance may cause long-term effects in the aquatic environment.

### NOTES

Depending on the degree of exposure, periodic medical examination is indicated.  
Do NOT take working clothes home.

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information