

**MANGANESE SULPHATE MONOHYDRATE****0290**

March 1996

CAS No: 10034-96-5  
RTECS No: OP0893500Manganous sulphate monohydrate  
MnSO<sub>4</sub>·H<sub>2</sub>O  
Molecular mass: 169.0

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: use appropriate extinguishing media.
<b>EXPLOSION</b>			
<b>EXPOSURE</b>		<b>PREVENT DISPERSION OF DUST!</b>	
<b>Inhalation</b>	Cough. Laboured breathing. Shortness of breath. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Half-upright position. Refer for medical attention.
<b>Skin</b>		Protective gloves.	
<b>Eyes</b>	Redness.	Safety spectacles or eye protection in combination with breathing protection if powder.	First rinse with plenty of water (remove contact lenses if easily possible).
<b>Ingestion</b>	Sore throat.	Do not eat, drink, or smoke during work.	Rinse mouth.

**SPILLAGE DISPOSAL**

Personal protection: P2 filter respirator for harmful particles. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water.

**PACKAGING & LABELLING****EMERGENCY RESPONSE****SAFE STORAGE**

Dry.

**IPCS**International  
Programme on  
Chemical SafetyPrepared in the context of cooperation between the International  
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## IMPORTANT DATA

**Physical State; Appearance**

PINK HYGROSCOPIC CRYSTALS.

**Chemical dangers**

The substance decomposes on heating producing sulfur oxides and manganese oxides.

**Occupational exposure limits**TLV: as Mn 0.2 mg/m<sup>3</sup> as TWA; (ACGIH 2006).MAK: (as Mn) (Inhalable fraction) 0.5 mg/m<sup>3</sup>; Pregnancy risk group: C; (DFG 2005).**Routes of exposure**

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

**Inhalation risk**

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

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

The substance may have effects on the central nervous system.

## PHYSICAL PROPERTIES

Relative density (water = 1): 2.95

Solubility in water, g/100 ml: 39.3

## ENVIRONMENTAL DATA

## NOTES

Card has been partially updated in October 2006. See section Effects of Long-Term Exposure.

## 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