

# MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-100/10034-96-5.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**

10034-96-5

**Code:**

M

**RTECS:**

OP0893500

**Code:**

M

**Name:**

MANGANESE SULFATE MONOHYDRATE

**Other REC Limits:**

NOT ESTABLISHED

**OSHA PEL:**

NOT ESTABLISHED

**Code:**

M

**OSHA STEL:****Code:****ACGIH TLV:**

NOT ESTABLISHED

**Code:**

M

**ACGIH STEL:**

N/P

**Code:**

## Control Measures

**Respiratory Protection:**

IF VENTILATION DOES NOT MAINTAIN INHALATION EXPOSURES BELOW PEL (TLV), USE NIOSH/MSHA APPROVED RESPIRATOR AS PER CURRENT 29 CFR 1910.134, INSTRUCTIONS/WARNINGS AND NIOSH-RESPIRATOR SELECTION.

**Ventilation:**

MECHANICAL (GENERAL) VENTILATION IS REQUIRED. LOCAL EXHAUST MAY BE REQUIRED IF WORK AREA IS NOT VENTED.

**Protective Gloves:**

4 RUBBER

**Eye Protection:**

CHEMICAL SAFETY GOGGLES

**Other Protective Equipment:**

Equipment SAFETY SHOWER AND EYE BATH. OTHER EQUIPMENT AS REQUIRED TO MINIMIZE EXPOSURE FROM PROLONGED OR REPEATED CONTACT.

**Work Hygienic Practices:**

WASH THROUGHLY AFTER HANDLING AND BEFORE EATING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

**Supplemental Safety and Health:**

NONE

## Health Hazards Data

**LD50/LC50/Mixture:**

LD50 (ORAL RAT) IS UNKNOWN

**Route Of Entry Inds - Inhalation:**

NO

**Skin:**

NO

**Ingestion:**

YES

**Carcinogenicity Inds - NTP:**

NO

**IARC:**

NO

**OSHA:**

NO

**Health Hazards Acute And Chronic:**

ACUTE: MAY BE HARMFUL IF SWALLOWED. MAY IRRITATE EYES, SKIN, AND MUCOUS MEMBRANES ON CONTACT. CHRONIC: UNKNOWN

**Explanation Of Carcinogenicity:**

NONE OF THE CHEMICALS IN THIS PRODUCT IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

**Signs And Symptoms Of Overexposure:**

SEE HEALTH HAZARDS.

**Medical Cond Aggravated By Exposure:**

NONE SPECIFIED BY MANUFACTURER.

**First Aid:**

INHALATION: REMOVE SUBJECT TO FRESH AIR. EYE: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. INGESTION: INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

**Spill Release Procedures:**

ABSORB WITH SAND OR VERMICULITE AND SCOOP UP AND CONTAINERIZE FOR PROPER DISPOSAL.

**Neutralizing Agent:**

NONE SPECIFIED BY MANUFACTURER.

**Waste Disposal Methods:**

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. 3

**Handling And Storage Precautions:**

STORE IN COOL, DRY, WELL VENTILATED AREA. PROTECT FROM PHYSICAL DAMAGE, HEAT AND IGNITION SOURCES. KEEP CONTAINERS CLOSED.

**Other Precautions:**

EMPTY CONTAINERS MAY BE HAZARDOUS DUE TO RETAINED RESIDUE. KEEP AWAY FROM HEAT, BASES, ACIDS, OXIDIZERS.

## Fire and Explosion Hazard Information

**Flash Point Method:**

N/P

**Flash Point:****Flash Point Text:**

NONFLAMMABLE

**Autoignition Temp:**

N/A

**Autoignition Temp Text:**

N/A

**Lower Limits:**

N/K

**Upper Limits:**

N/K

**Extinguishing Media:**

USE MEDIA COMPATABLE WITH SURROUNDING MATERIAL.

**Fire Fighting Procedures:**

FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

**Unusual Fire/Explosion Hazard:**

NONE

## Physical/Chemical Properties

**HCC:**

N1

**NRC/State IIC No:****Net Prop WT For Ammo:****Boiling Point:****B.P. Text:**

32.0F,0.0C

**Melt/Freeze Pt:****Decomp Temp:****Decomp Text:****Vapor Pres:**

LIKE H2O

**Vapor Density:**

LIKE H2O

**Volatile Org Content %:****Spec Gravity:**

1

**VOC Pounds/Gallon:****PH:**

N/P

**VOC Grams/Liter:****Viscosity:**

N/P

**Evaporation Rate & Reference:****Appearance and Odor:**

ODORLESS PINK LIQUID

**Solubility in Water:**

COMPLETE 5

**Corrosion Rate:****UNKNOWN Rate:****Percent Volatiles by Volume:**

97%

**Unusual Fire/Explosion Hazard:**

NONE

## Reactivity Data

**Stability Indicator:**

YES

**Stability Condition To Avoid:**

NONE NOTED

**Materials To Avoid:**

STRONG OXIDIZING AGENTS, STRONG ACIDS, BASES.

**Hazardous Decomposition Products:**

OXIDES OF SULFUR

**Hazardous Polymerization Indicator:**

NO

**Conditions To Avoid Polymerization:**

NOT APPLICABLE

## Toxicological Information

**Information:****MSDS Transport Information:****Information:****Regulatory Information:****Information:****Sara Title III Information:**

N/P

**Federal Regulatory Information:**

N/P

**State Regulatory Information:**

N/P

## Other Information

**Other Information:****Information:**