

# 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

**ACGIHSTEL:**  
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 THOROUGHLY AFTER HANDLING AND BEFORE EATING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

**Supplemental Safety and Health:**  
NONE

## Health Hazards Data

**LD50LC50Mixture:**  
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 ILF 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: INDUC E 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:**  
EMPY 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:**

**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 LIC No:**

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
32.0F,0.0C

**Melt/Freeze Pt:**

**M.P/F.P Text:**  
N/R

**Decomp Temp:**

**Decomp Text:**  
UNKNOWN

**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:**  
N/K

**Solubility in Water:**  
COMPLETE 5

**Appearance and Odor:**  
ODORLESS PINK LIQUID

**Percent Volatiles by Volume:**  
97%

**Corrosion Rate:**  
UNKNOWN

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
NONE NOTED

**Materials To Avoid:**  
STRONG OXIDIZING AGENTS, STRONG ACIDS AND BASES.

**Hazardous Decomposition Products:**  
OXIDES OF SULFUR.

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
NOT APPLICABLE

## Toxicological Information

**Information:**N/P

## MSDS Transport Information

**Information:**N/P

## Regulatory Information

**Sara Title III Information:** N/P

**Federal Regulatory Information:** N/P

**State Regulatory Information:** N/P

## Other Information

**Other Information:**N/P