MATERIAL SAFETY DATA SHEET For R&D use only. Not for drug, household or other uses. Click http://www.lookchem.com/cas-122/12227-89-3.html for suppliers of this product.

RTECS: Code: Χ

Name: BLACK IRON OXIDE **Other REC Limits:** NONE RECOMMENDED

OSHA PEL:

OSHA STEL:

ACGIH TLV: 5 MG (FE)/M3

ACGIHSTEL:

Ventilation:

Control Measures

Respiratory Protection:

WATERYS & SEWERS.

Neutralizing Agent:

REGULATIONS.

Other Precautions:

Flash Point Method:

PMCC

Flash Point:

105F,41C

N/K

1.5

8.5

HCC: F4

N/R

NRC/State LIC No:

Boiling Point:

Melt/Freeze Pt:

M.P/F.P Text: UNKNOWN

Decomp Temp:

Decomp Text: UNKNOWN

Vapor Pres: <20 MM HG

5-8

Vapor Density:

Spec Gravity: 1.60-1.85 7

PH: N/R

Viscosity:

UNKNOWN

NEGLIGIBLE

20-30

YES

N/K

VOC Pounds/Gallon:

VOC Grams/Liter:

Solubility in Water:

Corrosion Rate:

Stability Indicator:

Materials To Avoid:

Information:N/P

Information:N/P

UNKNOWN

Appearance and Odor:

Percent Volatiles by Volume:

Reactivity Data

Stability Condition To Avoid:

STRONG OXIDIZING AGENTS.

Hazardous Decomposition Products:

Hazardous Polymerization Indicator:

Conditions To Avoid Polymerization: NONE SPECIFIED BY MANUFACTURER.

Toxicological Information

Regulatory Information

Sara Title III Information: N/P

Federal Regulatory Information: N/P

State Regulatory Information: N/P

Other Information

Look for Chemicals

www.lookchem.com

Other Information:N/P

MSDS Transport Information

Evaporation Rate & Reference:

WHITE (OR TINTED), OPAQUE LIQUID WITH CHARACTERISTIC ODOR

DO NOT STORE OR USE WITH OPEN SOURCES OF IGNITION.

CARBON MONOXIDE, CARBON DIOXIDE, NITROGEN OXIDES, SULFUR OXIDES, HYDROGEN CHLORIDE.

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any

guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from

handling or from contact with the above product. See reverse side of invoice or packing slip for additional

WARRANTY

terms and conditions of sale.

Volatile Org Content %:

B.P. Text: >302F,>150C

Net Prop WT For Ammo:

Lower Limits:

Upper Limits:

Extinguishing Media:

Fire Fighting Procedures:

CONTAINERS WITH WATER SPRAY.

Physical/Chemical Properties

Unusual Fire/Explosion Hazard:

Flash Point Text:

Autoignition Temp:

Autoignition Temp Text:

Waste Disposal Methods:

NONE SPECIFIED BY MANUFACTURER.

Handling And Storage Precautions:

FROM CHILDREN.DO NOT TAKE INTERNALLY.

AVOID CONTACT WITH SKIN. WASH THOROUGHLY AFTER HANDLING.

Fire and Explosion Hazard Information

USE CARBON DIOXIDE, HIGH EXPANSION CHEMICAL FOAM, OR INORGANIC DRY CHEMICAL.

CONTAINERS MAY DEVELOP PRESSURE AND BURST IF EXPOSED TO HEAT OR FLAME.

Code:

Code:

Code: Μ

NΡ Code:

Μ

10 MG (FE)/M3

Cas:

Composition/Information on Ingredient

12227-89-3 Code:

Protective Gloves: NEOPRENE OR NATURAL RUBBER GLOVES **Eye Protection:** PAINT GOGGLES/SAFETY GLASSES AS REQUIRED **Other Protective Equipment:** Equipment INDUSTRIAL-TYPE WORK CLOTHING, HAT AND APRON AS REQUIRED.

6 USE NIOSH/MSHA APPROVED RESPIRATOR W/ORGANIC VAPOR CARTRIDGE OR SUPPLIED AIR RESPIRATOR OR

SCBA, AS SITUATION REQUIRES. USE IAW 29 CFR 1910.134 AND MANUFACTURER'S RECOMMENDATIONS.

USE LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW APPLICABLE EXPOSURE LIMITS.

Work Hygienic Practices: WASH HANDS AFTER USE AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE. **Supplemental Safety and Health:** MSDS ENTERED BY DLA-HMIS UNDER PROJECT WITH GSA. **Health Hazards Data** LD50LC50Mixture: LD50 (ORAL RAT) IS UNKNOWN

Route Of Entry Inds - Inhalation: Skin: YES

Ingestion: YES **Carcinogenicity Inds - NTP: IARC:**

NO OSHA: NO **Health Hazards Acute And Chronic:**

THERE IS CURRENTLY NO EVIDENCE OF ADVERSE EFFECTS RESULTING FROM ROUTINE EXPOSURE. HIGH VAPOR CONCENTRATIONS MAY CAUSE CNS EFFECTS. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPO SURE TO SOLVENTS WITH

PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE MAY BE HARMFUL OR FATAL. **Explanation Of Carcinogenicity:** NONE OF THE COMPOUNDS IN THIS PRODUCT IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

Signs And Symptions Of Overexposure: DROWSINESS, LIGHT-HEADEDNESS. **Medical Cond Aggravated By Exposure:** NONE SPECIFIED BY MANUFACTURER. First Aid: EYES-IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES, HOLD LIDS OPEN. GET MEDICAL ATTENTION. SKIN-WASH WITH SOAP & WATER. REMOVE CONTAMINATED CLOTHING. GET MEDICAL ADVICE IF IRRITATION OCCURS. INHALATION- REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF REQUIRED. INGESTION-DO NOT INDUCE VOMITING. IF CONSCIOUS, GIVE 1-2 GLASSES OF WATER OR MILK. GET MEDICAL ATTENTION IMMEDIAT **Spill Release Procedures:** 5 ELIMINATE ALL SOURCES OF IGNITION. PLACE LEAKING CONTAINERS IN A WELL-VENTILATED AREA. WEAR PROTECTIVE CLOTHING AND

SCBA. CONFINE SPILLED MATERIAL AND ABSORB ON INERT MATERIAL AND PLACE IN A CONTAINER FOR LATER DISPOSAL. KEEP FROM

INCINERATE SOLIDIFIED WASTE OR BURY IN A SUITABLE LANDFILL. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL

KEEP AWAY FROM HEAT, SPARKS & OPEN FLAMES.DO NOT BREATH VAPORS.KEEP CONTAINERS CLOSED WHEN NOT IN USE.KEEP AWAY

WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED