

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-108/108-45-2.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
108-45-2  
**Code:**  
M

**RTECS:**  
SS7700000  
**Code:**  
M

**Name:**  
M-PHENYLENEDIAMINE

**Other REC Limits:**  
N/P

**OSHA PEL:**  
2 NOT ESTABLISHED  
**Code:**  
M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
0.1 MG/M3; 9192  
**Code:**  
M

**ACGIHSTEL:**  
N/P  
**Code:**

## Control Measures

**Respiratory Protection:**  
N/P 4

**Ventilation:**  
GENERAL,LOCAL WHERE NEEDED,ESP WHERE VAP CAN ESCAPE

**Protective Gloves:**  
BUTYL/NEOPRENE

**Eye Protection:**  
MONOGOGGLES

**Other Protective Equipment:**  
Equipment APRON,IF DIRECT EXPOS LIKELY,CHEM PROOF SUIT,HOOD,AIR SUPPLY

**Work Hygienic Practices:**  
N/P

**Supplemental Safety and Health:**  
MSDS PREP JAN 14,86.EYE CONTACT:MOD CORNEAL INJ,GLAUCOPSIA,BLUE HAZE,HALOS & BLUR VISION.EFFECT GOES AWAY IN FEW HRS BUT PREDISPOSES ONE TO ACCIDENTS,REDUCES ABILITY TO DRIVE CAR.(SEE OTH PRE)

## Health Hazards Data

**LD50LC50Mixture:**  
N/P

**Route Of Entry Inds - Inhalation:**  
N/P

**Skin:**  
N/P

**Ingestion:**  
N/P

**Carcinogenicity Inds - NTP:**  
N/P

**IARC:**  
N/P

**OSHA:**  
N/P

**Health Hazards Acute And Chronic:**  
N/P

**Explanation Of Carcinogenicity:**  
N/P

**Signs And Symptions Of Overexposure:**  
INGEST:MOD TOX,BURNS MOUTH,THROAT,ABDOM PAIN,NAUS,VOM,DIARR.SKIN:BURNS,ALLERGIC SKIN RXN.SUPP DATA

**Medical Cond Aggravated By Exposure:**  
N/P

**First Aid:**  
INHAL:REMOVE TO FRESH AIR.CALL MD;SKIN:WASH W/ SOAP & PLENTY WATER.EYE:IMMED FLOOD W/ PLENTY WATER @ LEAST 15 MIN.CALL MD.INGEST:INDUCE VOMIT BY GIVING 2 GLASS WATER & STICKING FINGER DOWN THROAT,CALL MD.

**Spill Release Procedures:**  
AVOID CONTACT W/ LIQ,VAP.SMALL SPILLS CAN BE FLUSHED W/ LG AMTS WATER.LARGER SPILLS SHLD BE COLLECTED FOR DISPOSAL:IF MOLTEN,CONTAIN W/ SAND,EARTH DAM & LET FREEZE,TRANSFER TO COVERED METAL CONTR.AVOI D CAUSING DUST,FLUSH AREA W/ DETERG & WATER 3

**Neutralizing Agent:**  
N/P

**Waste Disposal Methods:**  
COMPLY W/ REGS ON REPORTING RELEASES.DO NOT DISCHARGE TO SEWER,WATERWAY.INCINERATE IN FURNACE WHERE PERMITTED BY STATE,FEDERAL,LOCAL REGULATIONS.MAY BE SENT TO APPRVD HAZ MAT DISP AREA OR CONTRACTOR.C OMPLY WITH ALL FEDERAL,STATE,AND LOCAL REGS.

**Handling And Storage Precautions:**  
KEEP CONTAINER CLOSED,AVOID BREATHING VAPOR.DO NOT GET IN EYES,ON SKIN OR CLOTHING.DO NOT TAKE INTERNALLY.USE ADEQ VENT.WASH AFTER HANDLING.

**Other Precautions:**  
NOT RECONIZED CARCINOGEN,BUT EXPOSURE LIMITS NOT ESTABLISHED.OVEREXPO:INHAL:IRRIT.MAY CAUSE NAUS,VOMIT,AND SENSITIZATION OF RESP TRACT,ASTHMATIC RESPONSE.

## Fire and Explosion Hazard Information

**Flash Point Method:**  
N/P

**Flash Point:**

**Flash Point Text:**  
245,118C TOC

**Autoignition Temp:**

**Autoignition Temp Text:**  
N/A

**Lower Limits:**  
N/K

**Upper Limits:**  
N/K

**Extinguishing Media:**  
WATER,CO\*2,FOAM

**Fire Fighting Procedures:**  
SCBA & PROT CLOTHING.OXIDES OF NITROGEN WILL BE EVOLVED.

**Unusual Fire/Explosion Hazard:**  
MAY PRODUCE FLOATING FIRE HAZARD AND EXTREME FIRE CONDITIONS

## Physical/Chemical Properties

**HCC:**  
B2

**NRC/State LIC No:**  
N/R

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
473F,245C

**Melt/Freeze Pt:**

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

**Decomp Temp:**

**Decomp Text:**  
N/A

**Vapor Pres:**  
0

**Vapor Density:**  
N/P

**Volatile Org Content %:**

**Spec Gravity:**  
1.045

**VOC Pounds/Gallon:**

**PH:** N/P 5

**VOC Grams/Liter:**

**Viscosity:**  
N/P

**Evaporation Rate & Reference:**  
0.01(BUAC)

**Solubility in Water:**  
35%(WT-25)

**Appearance and Odor:**  
DARK AMBER LIQUID,AMMONIACAL ODOR

**Percent Volatiles by Volume:**  
N/K

**Corrosion Rate:**  
N/P

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
NONE(PER MFR)

**Materials To Avoid:**  
ACIDS,OXIDIZERS,ALDEHYDES,KETONES,ORGANIC HALIDES

**Hazardous Decomposition Products:**  
CO,CO\*2,NITROGEN OXIDES

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
N/R(PER MFR)

## 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