

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-287/28768-32-3.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
28768-32-3  
**Code:**  
M  
**RTECS:**  
**Code:**  
X  
**Name:**  
4,4'-METHYLENE DIANILINE

**Other REC Limits:**  
NONE RECOMMENDED

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

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
NOT ESTABLISHED  
**Code:**  
M

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

## Control Measures

**Respiratory Protection:**  
5 NK

**Ventilation:**  
LOCAL EXHAUST

**Protective Gloves:**  
IMPERMEABLE

**Eye Protection:**  
SAFETY GLASSES

**Other Protective Equipment:**  
Equipment PROTECTIVE CLOTHING

**Work Hygienic Practices:**  
NK

**Supplemental Safety and Health:**  
NK

## Health Hazards Data

**LD50LC50Mixture:**  
NK

**Route Of Entry Inds - Inhalation:**  
YES

**Skin:**  
YES

**Ingestion:**  
YES

**Carcinogenicity Inds - NTP:**  
NO

**IARC:**  
NO

**OSHA:**  
NO

**Health Hazards Acute And Chronic:**  
PROLONGED/REPEATED CONTACT/INHALATION MAY CAUSE IRRITATION TO EYES, RESPIRATORY TRACT OR SKIN.

**Explanation Of Carcinogenicity:**  
NK

**Signs And Symptions Of Overexposure:**  
NK

**Medical Cond Aggravated By Exposure:**  
NK

**First Aid:**  
SKIN: WASH W/SOAP. FLUSH W/PLENTY OF WATER. GET MEDICAL AID IF IRRITATION PERSISTS. EYES: FLUSH W/WATER 15 MINUTES. CALL DR IMMEDIATELY. INGESTION: GET IMMEDIATE MEDICAL AID. INHAL:MOVE TO FREAH AIR O R CONSULT DR IF IRRITATION PERSISTS.

**Spill Release Procedures:**  
4 WIPE UP EXCESS W/TOLUENE, XYLENE, METHYL ETHYL KETONE.

**Neutralizing Agent:**  
NK

**Waste Disposal Methods:**  
DISPOSE OF ACCORDING TO LOCAL, STATE, FEDERAL ENVIRONMENTAL REGULATIONS.

**Handling And Storage Precautions:**  
TOXIC! AVOID MOISTURE. ACTIVATOR HAS DIISOCYANATES. AVOID CHRONIC BREATHING VAPORS/SKIN/EYE CONTACT. WASH HANDS WELL AFTER USE/BEFORE EATING/SMOKING.

**Other Precautions:**  
IF EYE CONTACT FLUSH THOROUGHLY W/WATER. GET MED AID. USE W/ADEQUATE VENTILATION. KEEP AWAY FROM CHILDREN. STORAGE LIFE ABOUT 6 MONTHS WHEN STORED <80F IN ORIGINAL SEALED CONTAINER.

## Fire and Explosion Hazard Information

**Flash Point Method:**  
TCC

**Flash Point:**

**Flash Point Text:**  
>230F,>110C

**Autoignition Temp:**

**Autoignition Temp Text:**  
NK

**Lower Limits:**  
NK

**Upper Limits:**  
NK

**Extinguishing Media:**  
FOAM, CO, DRY CHEMICAL.

**Fire Fighting Procedures:**  
WEAR SCBA TO PROTECT AGAINST INHALATION OF DANGEROUS COMBUSTION PRODUCTS.

**Unusual Fire/Explosion Hazard:**  
NONE

## Physical/Chemical Properties

**HCC:**

**NRC/State LIC No:**  
NK

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
NK

**Melt /Freeze Pt:**

**M.P/F.P Text:**  
NK

**Decomp Temp:**

**Decomp Text:**  
NK

**Vapor Pres:**  
NK

**Vapor Density:**  
NK

**Volatile Org Content %:**

**Spec Gravity:**  
1.11

**VOC Pounds/Gallon:**

**PH:** NK 6

**VOC Grams/Liter:**

**Viscosity:**  
NK

**Evaporation Rate & Reference:**  
NK

**Solubility in Water:**  
INSOLUBLE.

**Appearance and Odor:**  
BLACK LIQUID, TAR-LIKE ODOR.

**Percent Volatiles by Volume:**  
TRACE.

**Corrosion Rate:**  
NK

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
HEAT, SPARKS, OPEN FLAME, FIRE.

**Materials To Avoid:**  
NK

**Hazardous Decomposition Products:**  
THERMAL DECOMP MAY YIELD CARBON MONOXIDE, CARBON DIOXIDE OTHER TOXIC FUMES.

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
NK

## 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