

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-101/10102-44-0.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
10102-44-0  
**Code:**  
M

**RTECS:**  
QW9800000  
**Code:**  
M

**Name:**  
NITROGEN DIOXIDE (SARA III)

**Other REC Limits:**  
N/R

**OSHA PEL:**  
C,5 PPM  
**Code:**  
M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
3 PPM/5 STEL; 9293  
**Code:**  
M

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

## Control Measures

**Respiratory Protection:**  
RESPIRATORY APPROVED BY NIOSH FOR NITRIC ACID/NITROGEN DIOXIDE GASES

**Ventilation:**  
ALL HANDLING SHOULD BE DONE IN A CLOSED VENTILATION.

**Protective Gloves:**  
NEOPRENE

**Eye Protection:**  
4 GLASSES/FACESHIELD/GOGGLE

**Other Protective Equipment:**  
Equipment DONT WEAR CONTACT LENSES. FULL PROTECTIVE CLOTHING BOOTS.

**Work Hygienic Practices:**  
N/P

**Supplemental Safety and Health:**  
MSDS DATE: 03/80. SUPPLIER: ATOMERGIC CHEMETALS CORP, FARMINGDALE, NY.

## Health Hazards Data

**LD50LC50Mixture:**  
N/P

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

**Skin:**  
YES

**Ingestion:**  
NO

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

**IARC:**  
N/P

**OSHA:**  
N/P

**Health Hazards Acute And Chronic:**  
ACID GASES OR MIST CAUSES SEVERE BURNS,CAN BE FATAL IF INGESTED.

**Explanation Of Carcinogenicity:**  
N/R

**Signs And Symptions Of Overexposure:**  
SKIN, EYES, NOSE, LUNG, MOUTH, THROAT & UPPER RESPIRATORY SYSTEM IRRITATION; BURNS, CONJUNCTIVITIS

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

**First Aid:**  
SKIN/EYES: FLUSH W/WATER FOR AT LEAST 15 MINS. REMOVE CONTAMINATED CLOTHING. INGESTION: DRINK MILK TO ACID. DONT INDUCE VOMITING. INHALATION: CARRY TO UNCONTAMINATED AREA/KEEP QUIET. GET PROMPT MED A TT. EFFECTS OF INHALATION MAY BE DELAYED.

**Spill Release Procedures:**  
GOOD VENTILATION IS NECESSARY. PERSON EXPOSED SHOULD WEAR FULL PROTECTIVE EQUIPMENT.ILUTE SMALL SPILLS CAUTIOUSLY W/PLENTRY OF WATER IF THE RESULTING SPATTERG & VIOLENT REACTION CAN BE SAFELY CONTAINED , THEN NEUTRALIZED W/ALKALI.

**Neutralizing Agent:**  
N/P

**Waste Disposal Methods:**  
DISPOSAL OF RED FUMING NITRIC ACID MAY BE SUBJECT TO FEDERAL, STATE, & LOCAL REGULATIONS.

**Handling And Storage Precautions:**  
3 STORE IN A WELL-VENTILATED, PROPERLY-DRAINED SITE, AWAY FROM HEAT & OUT OF SUN. PROTECT FROM PSICAL DAMAGE. DONT BREATHE THESE GASES.

**Other Precautions:**  
AVOID INHALATION OF VAPORS OR MISTS & ALL BODILY CONTACT. KEEP AWAY FROM INCOMPATIBLE SUBSTANCES.

## Fire and Explosion Hazard Information

**Flash Point Method:**  
N/P

**Flash Point:**

**Flash Point Text:**  
NOT FLAMMABLE

**Autoignition Temp:**

**Autoignition Temp Text:**  
N/A

**Lower Limits:**  
N/R

**Upper Limits:**  
N/R

**Extinguishing Media:**  
N/K

**Fire Fighting Procedures:**  
NOX MAY BE PRESENT FROM VENTED OR RUPTURED CONTAINERS.

**Unusual Fire/Explosion Hazard:**  
IF WATER IS ADDED, VIOLENT SPATTERING CAN OCCUR. CONSIDERABLE HEAT IS EVOLVED WHEN CONTACTED W/WATER

## Physical/Chemical Properties

**HCC:**  
D1

**NRC/State LIC No:**

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
64.2C

**Melt/Freeze Pt:**

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

**Decomp Temp:**

**Decomp Text:**  
N/A

**Vapor Pres:**  
139

**Vapor Density:**  
1.58

**Volatile Org Content %:**

**Spec Gravity:**  
1.55

**VOC Pounds/Gallon:**

**PH:** N/P

**VOC Grams/Liter:**

**Viscosity:**  
N/P

**Evaporation Rate & Reference:**  
(BUAC = 1):

**Solubility in Water:**  
COMPLETE

**Appearance and Odor:**  
YELLOW TO RED BROWN, CLEAR, STRONGLY-FUMING LIQ

**Percent Volatiles by Volume:**  
14%

**Corrosion Rate:**  
N/P 5

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
INCREASING TEMP CAUSES MORE RAPID EVOLUTION OF THE NOX.

**Materials To Avoid:**  
METALS/HYDROGEN SULFIDE/TURPENTINE/CARBIDES/ALKALIS/FLUORINE

**Hazardous Decomposition Products:**  
TOXIC NITROGEN OXIDES WILL BE RELEASED.

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
BOILING CAUSES HAZARDOUS MIST(ACID/OXIDIZING) TO BE EVOLVED.

## 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