

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-169/16984-48-8.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
16984-48-8  
**Code:**  
M  
  
**RTECS:**  
LM6290000  
**Code:**  
M  
  
**Name:**  
FLUORIDE ION (1-)

**Other REC Limits:**  
N/P

**OSHA PEL:**  
2.5 MG/M3 (F)  
**Code:**  
M

**OSHA STEL:**  
  
**Code:**  
2

**ACGIH TLV:**  
2.5 MG/M3 (F); 8990  
**Code:**  
M

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

## Control Measures

**Respiratory Protection:**  
NIOSH/MSHA APPRVD AS NEEDED.

**Ventilation:**  
ADEQUATE TO MAINTAIN LEVELS BELOW TLV. 4

**Protective Gloves:**  
MOLDED RUBBER

**Eye Protection:**  
PROTECTIVE GOGGLES

**Other Protective Equipment:**  
Equipment PROTECTIVE CLOTHING BOOTS.

**Work Hygienic Practices:**  
N/P

**Supplemental Safety and Health:**  
N/P

## 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 Symptoms Of Overexposure:**  
CONTAINS HYDROFLUORIC ACID. CASUES SEVERE BURNS WHICH MAY NOT BE IMMEDIATELY PAINFUL OR VISIBLE.

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

**First Aid:**  
IN CASE OF CONTACT,PROMPT MEDICAL ATTENTION IS NEC. FLOOD W/LRG QUANTITY OF WATER APPLYING ICED BENZALKONIUM CHLORIDE SOLN OR MAGNESIUM SULFATE. FLUSH EYES W/COOL WATER AT LEAST 30 MINS. GET MEDICAL A TTENTION AT ONCE.

**Spill Release Procedures:**  
COVER W/SODIUM BICARBONATE OR SODA ASH/LIME MIXTURE(50/50). ADD WATER TO MAKE SLURRY. WASH DOWN DRAIN W/EXCESS WATER. WASH UP W/SODA ASH SOLUTION.

**Neutralizing Agent:**  
N/P 3

**Waste Disposal Methods:**  
ADD TO LARGE VOLUME OF SOLUTION OF SODA ASH-LIME MIXTURE. ADD NEUTRALIZED SOLUTION TO EXCESS RUNNING WATER TO DRAIN IN ACCORDANCE W/LOCAL,STATE & FEDERAL REGULATIONS.

**Handling And Storage Precautions:**  
REQUIRE DOT CORROSIVE LABEL. STORE UNDER COVER IN DRY PLACE OUT OF SUN & AWAY FROM DIRECT HEAT. CLOSE CONTAINER AFTER USE.

**Other Precautions:**  
DO NOT REUSE CONTAINER. RINSE WELL WITH WATER & INCINERATE.

## Fire and Explosion Hazard Information

**Flash Point Method:**  
N/P

**Flash Point:**

**Flash Point Text:**  
NONE TO BOIL PT.

**Autoignition Temp:**

**Autoignition Temp Text:**  
N/A

**Lower Limits:**

**Upper Limits:**

**Extinguishing Media:**  
NOT FLAMMABLE

**Fire Fighting Procedures:**  
NONE

**Unusual Fire/Explosion Hazard:**  
NONE

## Physical/Chemical Properties

**HCC:**  
C1

**NRC/State LIC No:**

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
180F,82C

**Melt/Freeze Pt:**

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

**Decomp Temp:**

**Decomp Text:**  
N/A

**Vapor Pres:**  
N/P

**Vapor Density:**  
N/P

**Volatile Org Content %:**

**Spec Gravity:**  
1.1500

**VOC Pounds/Gallon:**

**PH:** N/P

**VOC Grams/Liter:**

**Viscosity:**  
N/P

**Evaporation Rate & Reference:**  
APPROX 1.0,WATER

**Solubility in Water:**  
COMPLETE 5

**Appearance and Odor:**  
CLEAR COLORLESS LIQUID-SHARP ACID ODOR.

**Percent Volatiles by Volume:**  
72

**Corrosion Rate:**  
N/P

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
N/P

**Materials To Avoid:**  
ALKALIES

**Hazardous Decomposition Products:**  
AT DECOMP TEMPS, EMITS HIGHLY CORROSIVE FLUORIDE FUMES.

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
N/P

## 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