

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-283/2837-89-0.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
2837-89-0  
**Code:**  
M

**RTECS:**

**Code:**  
X

**Name:**  
2-CHLORO-1,1,1,2-TETRAFLUOROETHANE (SARA 313)

**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:**  
N/P

**Ventilation:**  
N/P

**Protective Gloves:**  
N/P

**Eye Protection:**  
N/P

**Other Protective Equipment:**  
Equipment N/P

**Work Hygienic Practices:**  
N/P

**Supplemental Safety and Health:**  
N/P 3

## 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:**  
N/P

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

**First Aid:**  
N/P

**Spill Release Procedures:**  
N/P

**Neutralizing Agent:**  
N/P

**Waste Disposal Methods:**  
N/P 2

**Handling And Storage Precautions:**  
N/P

**Other Precautions:**  
N/P

## Fire and Explosion Hazard Information

**Flash Point Method:**  
N/P

**Flash Point:**

**Flash Point Text:**  
NONE

**Autoignition Temp:**

**Autoignition Temp Text:**  
N/R

**Lower Limits:**  
N/R

**Upper Limits:**  
N/R

**Extinguishing Media:**  
WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL FOR SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

**Fire Fighting Procedures:**  
WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

**Unusual Fire/Explosion Hazard:**  
THIS PRODUCT CAN BE DECOMPOSED BY HIGH TEMPERATURES (OPEN FLAMES, GLOWING METALS) FORMING HYDROGEN FLUORIDE, HYDROGEN CHLORIDE AND TRACES OF CARBONYL HALIDES.

## Physical/Chemical Properties

**HCC:**  
G3

**NRC/State LIC No:**  
NOT RELEVANT

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
20.1F,-6.6C

**Melt/Freeze Pt:**

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

**Decomp Temp:**

**Decomp Text:**  
UNKNOWN

**Vapor Pres:**  
2053 @ 70F

**Vapor Density:**  
3.97

**Volatile Org Content %:**

**Spec Gravity:**  
1.32

**VOC Pounds/Gallon:**

**PH:** N/R

**VOC Grams/Liter:**

**Viscosity:**  
NOT RELEVANT

**Evaporation Rate & Reference:**  
HIGH (N-BUTYL ACETATE=1)

**Solubility in Water:**  
1.71% (MIN) @ 75.2 F

**Appearance and Odor:**  
COLORLESS GAS AT NORMAL TEMPERATURE AND PRESSURE - ETHEREAL ODOR

**Percent Volatiles by Volume:**  
100

**Corrosion Rate:**  
UNKNOWN

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
OPEN FLAMES, HEAT (ABOVE 125F/52C), GLOWING METAL SURFACES

**Materials To Avoid:**  
ALKALI OR ALKALINE EARTH METALS, POWDERED ALUMINUM, ZINC, BERYLLIUM, AMINES, ACIDS, WATER, METAL CHLORIDES, METAL OXIDES

**Hazardous Decomposition Products:**  
N/P

**Hazardous Polymerization Indicator:**  
N/P

**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