

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-778/7783-41-7.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
7783-41-7  
**Code:**  
M

**RTECS:**  
RS2100000  
**Code:**  
M

**Name:**  
OXYGEN DIFLUORIDE

**Other REC Limits:**  
N/K

**OSHA PEL:**  
C 0.05 PPM  
**Code:**  
M

**OSHA STEL:**  
ACGIH TLV: C 0.05 PPM  
**Code:**  
2 OSHA STEL:

**ACGIH TLV:**  
C 0.05 PPM  
**Code:**  
M

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

## Control Measures

**Respiratory Protection:**  
NIOSH APPROVED AIR SUPPLYING RESPIRATORY PROT W/ESCAPE BOTTLES/NIOSH APPRVD SELF CONTAINED BREATHING APPARATUS MAY BE REQD IF EXPOS TO HAZ INGREDIENTS MAY EXCEED RECOGNIZED SAFE LIMITS/OXYGEN LEVELS ARE DISPERSED TO LEVELS <19.5%.

**Ventilation:**  
HANDLE IN AN AREA WITH GOOD GENERAL ROOM VENTILATION.

**Protective Gloves:**  
LEATHER GLOVES.

**Eye Protection:**  
ANSI APPROVED CHEM WORKERS GOGGLES FULL LENGTH FACESHIELD (FP N).

**Other Protective Equipment:**  
Equipment ANSI APPROVED EYE WASH DELUGE SHOWER (FP N). LEATHER APRON. LAB COAT.

**Work Hygienic Practices:**  
NONE SPECIFIED BY MANUFACTURER. 5

**Supplemental Safety and Health:**  
MFR TRADE NAME/PART NO: 12% O2, BALANCE NITROGEN. VAPOR DENSITY: SIMILAR TO AIR. WASTE DISPOSAL METHOD: PROPER DISPOSAL, CONSULT APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

## Health Hazards Data

**LD50/LC50 Mixture:**  
NONE SPECIFIED BY MANUFACTURER.

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

**Skin:**  
NO

**Ingestion:**  
NO

**Carcinogenicity Routes - NTP:**  
NO

**IARC:**  
NO

**OSHA:**  
NO

**Health Hazards Acute And Chronic:**  
ACUTE: CARBON DIOXIDE: TARGET ORGANS: EYES & SKIN. EYE: CRYOGENIC BURNS MAY RESULT FROM CONTACT WITH GAS OR CYLINDER @ POINT OF EXIT FROM CYLINDER. SKIN: CRYOGENIC BURNS MAY RESULT FROM CONTACT WITH GAS OR CYLINDER @ POINT OF EXIT FROM CYLINDER. INHALATION: MAY CAUSE ASPHYXIA & SYMPTOMS OF EXPOSURE: HEADACHE, SHORTNESS OF BREATH, NAUSEA, VOMITING & DIZZINESS. OXYGEN(0-21%): TARGET ORGANS: EYES & SKIN. ACUTE: EYE: CRYOGENIC BURNS MAY RESULT FROM CONTACT WITH GAS OR CYLINDER @ POINT OF EXIT FROM CYLINDER. SKIN: CRYOGENIC BURNS MAY RESULT FROM CONTACT WITH GAS OR CYLINDER @ POINT OF EXIT FROM CYLINDER.

**Explanation Of Carcinogenicity:**  
3 NOT RELEVANT.

**Signs And Symptoms Of Overexposure:**  
HEALTH HAZARD: POINT OF EXIT FROM CYLINDER. SKIN CONTACT: CRYOGENIC BURNS MAY RESULT FROM CONTACT WITH GAS OR CYLINDER AT POINT OF EXIT FROM CYLINDER. INHALATION: MAY CAUSE ASPHYXIA IF IT DISPLACES OXYGEN IN AIR. SIGNS & SYMPTOMS OF EXPOSURE: HEADACHE, DIZZINESS, TUNNEL VISION, & NUMBING & TINGLING OF EXTREMITIES. CHRONIC: CARBON DIOXIDE: LONG-TERM EXPOSURE MAY AFFECT ACID-BASE BALANCE, RESULTING IN ACIDOSIS AND CAN AFFECT CALCIUM METABOLISM.

**Medical Condition Aggravated By Exposure:**  
NOT ESTABLISHED.

**First Aid:**  
INGESTION: CALL MEDICAL IMMEDIATELY (FP N). EYES: GET MEDICAL ATTENTION IMMEDIATELY. IMMEDIATELY FLUSH WITH POTABLE WATER FOR AT LEAST 15 MINUTES, SEEK ASSISTANCE FROM MEDICAL (FP N). SKIN: SEEK MEDICAL ADVICE IMMEDIATELY FOR CRYOGENIC BURNS. FLUSH WITH COPIOUS AMOUNTS OF WATER. CALL MEDICAL (FP N). INHALATION: REMOVE TO FRESH AIR.

**Spill Release Procedures:**  
NON-FLAMMABLE. VAPOR DENSITY RELATIVE TO AIR: SIMILAR. CLEAN-UP PROCEDURES: ALLOW GAS TO VENTILATE FROM AREA UNTIL NORMAL BREATHING AIR CONDITIONS ARE MET. RELEASES MUST BE HANDLED BY TRAINED PERSONNEL.

**Neutralizing Agent:**  
NONE SPECIFIED BY MANUFACTURER.

**Waste Disposal Methods:**  
DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE & LOCAL REGULATIONS. ADDITIONAL INFO REGARDING DISPOSAL: PRODUCT IS NOT CLASSIFIED AS HAZARDOUS WASTE ACCORDING TO EPA REGULATIONS (40 CFR 261). PRODUCT DOES NOT CONTAIN HEAVY METALS, VOLATILE/SEMI-VOLATILE ORGANIC COMPOUNDS, PHENOLS, PESTICIDES/POLYCHLORINATED BIPHENYLS (THAT IS, NO CHEMICALS ON EPA TOXIC POLLUTANT LIST (40 CFR 401.15)), HOWEVER, IN ORDER TO DETERMINE (SUPPLEMENTAL DATA)

**Handling And Storage Precautions:**  
KEEP CYLINDERS CLOSED WHEN NOT IN USE.

**Other Precautions:**  
IN ORDER TO MINIMIZE RISK OF UNCONTROLLED RELEASE OF GAS, ALWAYS SECURE FULL GAS CYLINDERS AND PROTECT CYLINDERS AND CYLINDER VALVES FROM DAMAGE. THIS PRODUCT SHOULD BE HANDLED IN ACCORDANCE WITH GOOD LABORATORY PRACTICES.

## Fire and Explosion Hazard Information

**Flash Point Method:**  
N/P 4

**Flash Point:**

**Flash Point Text:**  
NOT FLAMMABLE

**Autoignition Temp:**

**Autoignition Temp Text:**  
N/A

**Lower Limits:**  
N/K

**Upper Limits:**  
N/K

**Extinguishing Media:**  
MEDIA APPROPRIATE FOR SURROUNDING FIRE.

**Fire Fighting Procedures:**  
USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT (FP N). STANDARD FIRE-FIGHTING PRECAUTIONS SHOULD BE FOLLOWED WHEN TRYING TO EXTINGUISH ANY FIRE.

**Unusual Fire/Explosion Hazard:**  
NONE.

## Physical/Chemical Properties

**HCC:**

**NRC/State LIC No:**

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
N/K

**Melt/Freeze Pt:**

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

**Decomp Temp:**

**Decomp Text:**  
N/K

**Vapor Pres:**  
N/K

**Vapor Density:**  
SUPERDATA

**Volatile Org Content %:**

**Spec Gravity:**  
N/K

**VOC Pounds/Gallon:**

**PH:** N/K

**VOC Grams/Liter:**

**Viscosity:**  
N/P

**Evaporation Rate & Reference:**  
NOT KNOWN

**Solubility in Water:**  
SOLUBLE

**Appearance and Odor:**  
CLEAR GAS, ODORLESS.

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

**Corrosion Rate:**  
N/K

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
HEATING OR DAMAGING GAS CYLINDERS.

**Materials To Avoid:**  
STRONG REDUCING AGENTS.

**Hazardous Decomposition Products:**  
NOT ESTABLISHED. 6

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
NOT RELEVANT.

## 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