1. CORRECTIVE RESPONSE ACTIONS

**Stop discharge**

**Do not burn**

2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: Not listed.

2.2 Formula: CF₂O

2.3 IMO/UN Designation: 2;3;2417

2.4 DOT ID No.: 2417

2.5 CAS Registry No.: 135-65-4

2.6 NAMRG Guide No.: 125

2.7 Standard Industrial Trade Classification: 5;16;26

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Approved respirator; protective clothing.

3.2 Symptoms Following Exposure: Irritates lungs, causing delayed pulmonary edema. Slight gassing produces dryness or burning sensation in the throat, numbness, pain in the chest, bronchitis, and shortness of breath.

3.3 Treatment of Exposure: INHALATION: Remove victim from contaminated area; enforce absolute rest; call a doctor.

3.4 TLV-TWA: 2 ppm

3.5 TLV-STEL: 5 ppm

3.6 TLV-Ceiling: Not listed

3.7 Toxicity by Ingestion: Not pertinent.

3.8 Toxicity by Inhalation: Not pertinent.

3.9 Chronic Toxicity: Severe delayed pulmonary edema.

3.10 Vapor (Gas) Irritant Characteristics: Vapors cause severe irritation of eyes and throat and can cause eye and lung injury. They cannot be tolerated even at low concentrations.

3.11 Liquid or Solid Characteristics: Severe irritant to all tissues.

3.12 Odor Threshold: Currently not available

3.13 IDLH Value: Not listed

3.14 OSHA PEL-TWA: Not listed

3.15 OSHA PEL-STEL: Not listed

3.16 OSHA PEL-Ceiling: Not listed

3.17 EPA AQGL: Not listed

4. FIRE HAZARDS

4.1 Flash Point: Not flammable

4.2 Flammable Limits in Air: Not flammable

4.3 Fire Extinguishing Agents: Water to cool containers.

4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent

4.5 Special Hazards of Combustion Products: Toxic gas is generated when heated.

4.6 Behavior in Fire: Not pertinent

4.7 Auto Ignition Temperature: Not flammable

4.8 Electrical Hazards: Not pertinent

4.9 Burning Rate: Not flammable

4.10 Adiabatic Flame Temperature: Not pertinent

4.11 Stoichiometric Air to Fuel Ratio: Not pertinent

4.12 Flame Temperature: Currently not available

4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent

4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

5. CHEMICAL REACTIVITY

5.1 Reactivity with Water: Decomposes, but not vigorously

5.2 Reactivity with Common Materials: None

5.3 Stability During Transport: Stable

5.4 Neutralizing Agents for Acids and Caustics: Can be absorbed in caustic soda solution. One ton of Carbon Oxyfluoride requires 2,460 lbs. of caustic soda dissolved in 1,000 gal of water.

5.5 Polymerization: Not pertinent

5.6 Inhibitor of Polymerization: Not pertinent

6. WATER POLLUTION

6.1 Aquatic Toxicity: Currently not available

6.2 Waterfowl Toxicity: Currently not available

6.3 Biological Oxygen Demand (BOD): None

6.4 Food Chain Concentration Potential: None

6.5 GESAMP Hazard Profile: Not listed

7. SHIPPING INFORMATION

7.1 Grades of Purity: Commercial, 100%

7.2 Storage Temperature: Ambient

7.3 Inert Atmosphere: No requirement

7.4 Venting: Safety relief

7.5 IMO Pollution Category: Currently not available

7.6 Ship Type: Currently not available

7.7 Barge Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS

8.1 49 CFR Category: Poison Gas

8.2 49 CFR Class: 2.3

8.3 49 CFR Package Group: Not pertinent

8.4 Marine Pollutant: No

8.5 NFPA Hazard Classification:

\begin{tabular}{|l|l|}
\hline
Category & Classification \\
\hline
Health Hazard (Blue) & 4 \\
Flammability (Red) & 0 \\
Toxicity (Yellow) & 0 \\
\hline
\end{tabular}

8.6 EPA Reportable Quantity: 1000 pounds

8.7 EPA Pollution Category: C

8.8 ROR Waste Number: L033

8.9 EPA FWPCA List: Not listed

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15°C and 1 atm: Gas

9.2 Molecular Weight: 66.01

9.3 Boiling Point at 1 atm: -17°F = -83°C = 159°K

9.4 Freezing Point: -173°F = -114°C = 159°K

9.5 Critical Temperature: Currently not available

9.6 Critical Pressure: Currently not available

9.7 Specific Gravity: 1.139 at 114°C

9.8 Liquid Surface Tension: Currently not available

9.9 Liquid Water Interfacial Tension: Currently not available

9.10 Vapor (Gas) Specific Gravity: 2.28

9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available

9.12 Latent Heat of Vaporization: Currently not available

9.13 Heat of Combustion: Currently not available

9.14 Heat of Decomposition: Currently not available

9.15 Heat of Solution: Currently not available

9.16 Heat of Polymerization: Currently not available

9.17 Heat of Fusion: Currently not available

9.18 Limiting Values: Currently not available

9.19 Reid Vapor Pressure: Currently not available

NOTES

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