

UNION CARBIDE CORP -- UCON FLUOROCARBON 12 -- 6830-00-935-9895
===== Product Identification =====

Product ID:UCON FLUOROCARBON 12
MSDS Date:11/01/1988
FSC:6830
NIIN:00-935-9895
MSDS Number: BFYCV
=== Responsible Party ===
Company Name:UNION CARBIDE CORP
Address:39 OLD RIDGEBURY RD
City:DANBURY
State:CT
ZIP:06817-0001
Country:US
Info Phone Num:800-822-4357 OR 304-744-3487
Emergency Phone Num:800-82
2-4357 OR 304-744-3487
CAGE:6M841
=== Contractor Identification ===
Company Name:UNION CARBIDE CORP
Address:OLD RIDGEBURY RD
Box:City:DANBURY
State:CT
ZIP:06817
Country:US
CAGE:6M841
Company Name:UNION CARBIDE CORP LINDE DIV
Address:39 OLD RIDGEBURY RD
Box:City:DANBURY
State:CT
ZIP:06817-0001
Country:US
Phone:800-822-4357; 304-744-3487
CAGE:36346

===== Composition/Information on Ingredients =====

Ingred Name:DICHLORODIFLUOROMETHANE (SARA III)
CAS:75-71-8
RTECS #:PA8200000

Fraction by Wt: 100%
OSHA PEL:1000 PPM
ACGIH TLV:1000 PPM; 9192
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS
Ozone Depleting Chemical:1

===== Hazards Identification =====

LD50 LC50 Mixture:TLV 1000 PPM
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:FROSTBITE TO TISSUES UPON CONTACT WITH LIQUID. PRODUCT IS AN ASPHYXIANT. HIGH CONCENTRATIONS CAN CAUSE CENTRAL NERVOUS SYSTEM DISTURBANCES, SUFFOCATION, DEATH, CARDIAC ARRHYTHMIAS OR ARREST DUE TO SENSITIZATION OF HEART TO ADRENALIN. EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE FLU-LIKE SYMPTOMS.
Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT CARCINOGENS.
Effects of Overexposure:FROSTBITE, SEVERE TISSUE DAMAGE TO EYES/SKIN/MUCOUS MEMBRANES, DIZZINESS, NAUSEA, VOMITING, DISORIENTATION, CONFUSION, INCOORDINATION, NARCOSIS, SUFFOCATION, DEATH, HEART IRREGULARITIES.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

===== First Aid Measures =====

First Aid:SKIN: IMMEDIATELY WARM FROSTBITE AREA WITH WARM WATER. IN CASE OF MASSIVE EXPOSURE, REMOVE CLOTHING WHILE SHOWERING WITH WARM WATER. CALL A PHYSICIAN. INHALATION: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GIVE OXYGEN IF BREATHING IS DIFFICULT. CALL A PHYSICIAN. EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. SEE PHYSICIAN IMMEDIATELY, AN OPHTHALMOLOGIST IF POSSIBLE.

===== Fire Fighting Measures =====

Flash Point:NONFLAMMABLE
Lower Limits:NOT GIVEN
Upper Limits:NOT GIVEN
Extinguishing Media:NONFLAMMABLE. USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.
Fire Fighting Procedures:EVACULATE ALL PERSONNEL FROM DANGER AREA. IMMEDIATELY DELUGE CONTAINERS WITH WATER SPRAY FROM MAXIMUM

DISTANCE UNTIL COOL, THEN MOVE CONTAINERS AWAY FROM FIRE.
Unusual Fire/Explosion Hazard:CONTAINER MAY RUPTURE DUE TO HEAT OF
FIRE. TOXIC FUMES MAY BE PRODUCED WHEN HEATED.

===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE ALL PERSONNEL FORM DANGER AREA. USE
SELF-CONTAINED BREATHING APPARATUS WHERE NEEDED. SHUT OFF LEAD IF
POSSIBLE. VENTILATE AREA OR MOVE LEAKING CONTAINER TO WELL
VENTILATED AREA. TEST FOR SUFF ICIENT OXYGEN
BEFORE REENTRY.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====

Handling and Storage Precautions:STORE AND USE WITH ADEQUATE
VENTILATION. USE ONLY IN A CLOSED SYSTEM. CLOSE CYLINDER VALVE WHEN
NOT IN USE AND WHEN EMPTY. DO NOT SMOKE IN AREA.

Other Precautions:NEVER WORK ON A PRESSURIZED SYSTEM. IF THERE IS A
LEAK, CLOSE THE CYLINDER VALVE, BLOW DOWN THE SYSTEM BY VENTING TO
A SAFE PLACE, THEN REPAIR.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF VENTILATION DOES NOT MAINTAIN INHALATION
EXOSURES BELOW PEL (TLV), USE NIOSH/MSHA APPROVED RESPIRATOR AS PER
CURRENT 29 CFR 1910.134, INSTRUCTIONS/WARNINGS AND NIOSH RESPIRATOR
SELECTION.

Ventilation:LOCAL EXHAUST PREFERRED. USE LOCAL EXHAUST TO MAINTAIN
EXPOUSRE BELOW THE APPLICABLE LIMIT.

Protective Gloves:NEOPRENE

Eye Protection:SELECT IAW OSHA 29 CFR1910.133

Other Protective Equipment:MET

ATARSAL SHOES FOR CYLINDER HANDLING.

SELECT IAWW 29 CFR 1910.132 AND 1910.133.

Work Hygienic Practices:WASH WITH SOAP AND WATER AFTER HANDLING PRODUCT
AND BEFORE EATING DRINKING OR SMOKING.

Supplemental Safety and Health

NOTE TO PHYSICIAN: DO NOT ADMINISTER ADRENALIN DUE TO THE SENSITIZING
EFFECT OF FLUOROCARBONS ON THE MYCARDIUM. TREATMENT OF OVEREXPOSURE
SHOULD BE DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL
CONDITION.

===== Physical/Chemical Propert

ies =====

HCC:G3

Boiling Pt:B.P. Text:-22F,-30C

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Vapor Pres:70.2 PSIG

Vapor Density:4.2

Spec Gravity:1.486

Evaporation Rate & Reference:HIGH

Solubility in Water:NEGLIGIBLE

Appearance and Odor:COLORLESS GAS, ETHEREAL ODOR AT CONCENTRATIONS > 20%

Percent Volatiles by Volume:100 %

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

MAGNESIUM AND ITS ALLOYS CONTAINING > 2% MAGNESIUM IN THE PRESENCE OF

WATER, NATURAL RUBBER, ALUMINUM.

Stability Condition to Avoid:ELEVATED TEMPERATURES

Hazardous Decomposition Products:HYDROGEN CHLORIDE, HYDROGEN FLUORIDE, CARBON MONOXIDE, CARBON DIOXIDE.

===== Disposal Considerations =====

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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