

E I DUPONT DE NEMOURS & CO, FREON PROD -- HALON 1301 FIRE EXTINGUISHANT --
6830-01-376-8400

===== Product Identification =====

Product ID:HALON 1301 FIRE EXTINGUISHANT

MSDS Date:01/29/1999

FSC:6830

NIIN:01-376-8400

Status Code:A

MSDS Number: CKBXK

=== Responsible Party ===

Company Name:E I DUPONT DE NEMOURS & CO, FREON PROD

Address:1007 MARKET ST

City:WILMINGTON

State:DE

ZIP:19899

Country:US

In

fo Phone Num:800-441-3637-MED 800-424-9300-TRAN

Emergency Phone Num:800.424.9300

Resp. Party Other MSDS Num.:2040FR, #D0001083

Preparer's Name:NONE LISTED

Chemtrec Ind/Phone:(800)424-9300

CAGE:5P414

=== Contractor Identification ===

Company Name:E I DUPONT DE NEMOURS & CO, FREON PROD (REPLACED BY 73925)

Address:1007 MARKET ST

Box:City:WILMINGTON

State:DE

ZIP:19899

Country:US

Phone:800-441-3637-MED 800-424-9300-TRAN

CAGE:5P414

Company Name:FIKE CORP; FIKE FIRE SUPPRESSION SYSTEMS DIV

Address:704

S 10TH ST

Box:610

City:BLUE SPRINGS

State:MO

ZIP:64015

Country:US

Phone:816-229-3405

CAGE:0FAN7

Company Name:KIDDE FENWAL INC

Address:400 MAIN ST

Box:City:ASHLAND

State:MA

ZIP:01721-2150

Country:US

Phone:508-881-2000

CAGE:0KDP7

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

Ingred Name:BROMOTRIFLUOROMETHANE

CAS:75-63-8

RTECS #:PA5425000

ation =====

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:INHALATION: VAPOR IS HEAVIER THAN AIR AND CAN CAUSE SUFFOCATION BY REDUCING OXYGEN AVAILABLE FOR BREATHING. BREATHING HIGH CONCENTRATIONS OF VAPOR IS HARMFUL AND MAY CAUSE HEART IRREGULARITIES, SHORTNESS OF BREATH, AND MAY LEAD TO NARCOSIS, UNCONSCIOUSNESS OR DEATH. SKIN/EYE: LIQUID CONTACT MAY CAUSE FROSTBITE.

Explanation of Carcinogenicity:NONE OF THE COMPONENTS PRESENT IN THIS

MATERIAL AT CONCENTRATIONS EQUAL TO OR GREATER THAN
Effects of Overexposure:NAUSEA, HEADACHE, OR WEAKNESS, TEMPORARY CNS DEPRESSION WITH EFFECTS SUCH AS DIZZINESS, HEADACHE, CONFUSION, INCOORDINATION AND UNCONSCIOUSNESS. INHALATION OF HIGHER CONCENTRATION MAY CAUSE TEMPORARY ALTERATION OF THE HEART'S ELECTRICAL ACTIVITY WITH IRREGULAR PULSE, PALPITATION, OR INADEQUATE CIRCULATION. EYE AND SKIN CONTACT MAY CAUSE FROSTBITE.

Medical Cond Aggravated by Exp

posure:INDIVIDUALS WITH PREEXISTING DISEASES OF THE CNS OR CARDIOVASCULAR SYSTEM MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURE.

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

First Aid:INHALATION:IMMEDIATELY REMOVE TO FRESH AIR, CALL A PHYSICIAN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. SKIN: FLUSH WITH WATER FOR 15 MIN. GENTLY WARM THE EFFECTED AREA. SEEK MEDICAL ATTENTION. INGEST

ION: NOT

CONSIDERED A POTENTIAL ROUTE OF EXPOSURE. GET MEDICAL ATTENTION. EYES:IMMEDIATELY FLUSH WITH WATER FOR 15 MIN, GET MEDICAL HELP. NOTES TO PHYSICIANS: BECAUSE OF POSSIBLE DISTURBANCES OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD ONLY BE USED WITH SPECIAL CAUTION IN EMERGENCY LIFE SUPPORT.

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

Flash Point:NON-FLAMMABLE

Extinguishing Media:USE MEDIA AS APPROPRIATE FOR SURROUNDING F

IRES.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

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

Spill Release Procedures:VENTILATE ENCLOSED AREAS IN CASE OF INADVERTENT OR DELIBERATE DISCHARGE OF HALON. REMOVE OPEN FLAMES.

USE SELF-CONTAINED BREATHING APPARATUS (SCBA) FOR LARGE LEAK OR SPILL.

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

Handling and Storage Precautions:STORE IN A WELL-VENTILATED AREA OF LOW FIRE RISK. PROTECT CONTAINERS FROM PHYSICAL DAMAGE AND KEEP CLOSED.

Other Precautions:AVOID BREATHING VAPOR, LIQUID CONTACT WITH EYES, SKIN OR CLOTHING. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUES/VAPORS. USE IN A WELL VENTILATED AREA.

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

Respiratory Protection:NONE REQUIRED FOR ADEQUATELY VENTED WORK SITUATIONS. FOR ACCIDENTAL LARGE RELEASES OR NON-VENTILATED SITUATIONS, USE A SELF-CONTAINED BREATHING APPARATUS OR SUPPLIED-AIR RESPIRATOR, APPROVED BYNIOSH.

Ventilation:USE LOCAL WHEN LARGE AMOUNTS ARE RELEASED. USE MECHANICAL IN LOW CONCENTRATION OR ENCLOSED PLACES.

Protective Gloves:IMPERVIOUS GLOVES

Eye Protection:CHEMICAL SPLASH GOGGLES.

Other Protective Equipment:N

ONE LISTED

Work Hygienic Practices:AVOID PROLONGED EXPOSURE TO SKIN AND INHALATION.

Supplemental Safety and Health
USE IN A WELL VENTILATED AREA.

===== Physical/Chemical Properties =====

HCC:G3

Boiling Pt:=-57.6C, -72.F

Decomp Temp:>850.C, 1562.F

Vapor Pres:236 PSIA @25C(77F)

Vapor Density:5.14(AIR=1)

pH:NEUTRAL

Evaporation Rate & Reference:>1 (CCL4=1)

Solubility in Water:0.03 WT%

Appearance and Odor:LIQUIFIED GAS, CLEAR, COLORLESS, ETHEREAL ODOR.
(LIQ DE

NSITY:1.54 G/CC)
Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES
ALKALI OR ALKALINE EARTH METALS, POWDERED AL, ZN, BE ETC.
Stability Condition to Avoid:AVOID EXTENDED CONTACT WITH OPEN FLAMES,
GLOWING METAL SURFACES OR TEMPRATURES >1000F.
Hazardous Decomposition Products:TOXIC BROMINE AND CARBONYL HALIDES.

===== Toxicological Information =====

Toxicological Informat
ion:INHALATION 1 HR LC50 >70,000 PPM IN
RATS.EFFECTS SEEN IN ANIMALS FROM A SINGLE EXPOSURE BY INHALATION
INCLUDE CNS DEPRESSION AFFECTS AT HIGH CONCENTRATION. LUNG
IRRITATION & DEGENERATION OF THE LIVER & KIDNEY WERE SEEN IN
ANIMALS EXPOSED REPEATEDLY BY INHALATION TO THE LETHAL OR NEAR
LETHAL CONCENTRATIONS. CARDIAC SENSITIZATION WAS OBSERVED IN DOGS
WHEN EXPOSED TO CONCENTRATIONS = & > 7.5%. ANIMA L TESTING
INDICATES THAT THIS COMPOUND DOES NOT HAVE MUTAGENIC OR
EBMRYOTOXIC
EFFECTS.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE W/LOCAL, STATE &
FEDERAL REGULATIONS. RECLAIM BY DISTILLATION OR REMOVE TO PERMITTED
WASTE DISPOSAL FACILITY.

===== MSDS Transport Information =====

Transport Information:PSN: BROMOTRIFLUOROMETHANE, 2.2, UN1009. LABEL:
NON-FLAMMABLE GAS.

===== Regulatory Information =====

SARA
Title III Information:SEC 311, 312 HAZ CLASSIFICATION: ACUTE=YES,
CHRONIC,FIRE, REACTIVITY=NO, PRESSURE=YES. LISTS: EXTREMELY
HAZADOUS SUBSTANCE=NO, CERCLA HAZ SUBSTANCE=NO, TOXIC
CHEMICALS=YES. RCRA-HMIS RATING: H EALTH=1,
FLAMMABLILITY=0, REACTIVITY=1
Federal Regulatory Information:THE INGREDIENTS OF THIS PRODUCT ARE ON
THE TSCA INVENTORY.

===== Other Information =====

Disclaimer (provided with this information by the compiling a

gencies):

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.