

ATOCHEM INC. FOREX FIRE EXTINGUISHANTS -- HALON 1211;PYROFORANE 1211;FOREX 1211 --
6830-00-965-2309

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

Product ID:HALON 1211;PYROFORANE 1211;FOREX 1211

MSDS Date:10/14/1987

FSC:6830

NIIN:00-965-2309

MSDS Number: BHBTS

=== Responsible Party ===

Company Name:ATOCHEM INC. FOREX FIRE EXTINGUISHANTS

Address:266 HARRISTOWN RD

Box:607

City:GLEN ROCK

State:NJ

ZIP:07452

Coun

try:US

Preparer's Name:SAFETY & ENVIRONS AFFAIRS

CAGE:MO388

=== Contractor Identification ===

Company Name:ATOCHEM INC FOREX FIRE EXTINGUISHANTS

Address:266 HARRISTOWN RD

Box:607

City:GLEN ROCK

State:NJ

ZIP:07452

Country:US

Phone:800-424-9300 (CHEMTREC)

CAGE:5P418

Company Name:ATOCHEM INC. FOREX FIRE EXTINGUISHANTS

Address:266 HARRISTOWN RD

Box:607

City:GLEN ROCK

State:NJ

ZIP:07452

Country:US

CAGE:MO388

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

Ingred Name:BROMOCHLOR

ODIFLUOROMETHANE

CAS:353-59-3

RTECS #:PA5250500

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:EYE-CONTACT WITH LIQUID CAN CAUSE BURNS. SKIN-CONTACT WITH LIQUID CAN CAUSE FROSTBITE. INHALATION-NO TROUBLE OBSERVED AT CONCENTRATIONS BELOW 20,000PPM. AT HIGHER CONCENTRATIONS, NERVOUS TROUBLES AND POSSIBLE OF CARDIAC

IRREGULARITIES.

Explanation of Carcinogenicity:HALON 1211 IS NOT CLASSIFIED AS A CARCINOGEN BY IARC, NTP OR OSHA.

Medical Cond Aggravated by Exposure:NOTE TO PHYSICIAN: PRODUCT IS AN ASPHYXIAN AND MANY INDUCE CARDIAC MUSCLE SENSITIZATION TO EPINEPHRINE-LIKE COMPOUNDS. DO NOT GIVE ADRENALIN OR SIMILAR SYMPATHOMIMETIC DRUGS.

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

First Aid:EYE-FLUSH WITH FLOWING WATER FOR 15 MIN. GET MED ATTN. SKIN-FLUSH WITH WATER.

Call Physician if Frostbite symptoms occur.

Inhalation-REMOVE TO FRESH AIR. CALL PHYSICIAN. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. PREFERABLY MOUTH TO MOUTH. DO NOT GIVE EPINEPHRINE. INGESTION-DO NOT INDUCE VOMITING IF PATIENT IS UNCONSCIOUS OR HAVING CONVULSIONS.

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

Flash Point:NON-FLAMMABLE

Extinguishing Media:NON-FLAMMABLE PRODUCT-HALON 1211 IS USED AS A FIRE EXTINGUISHING AGENT ITSELF.

Fire Fighting

Procedures:SELF CONTAINED BREATHING APPARATUS MAY BE NECESSARY IF CYLINDER RUPTURES OR RELEASES PRODUCT UNDER FIRE CONDITIONS.

Unusual Fire/Explosion Hazard:THERMAL DECOMPOSITION GIVES TOXIC FUMES (HYDROBROMIC, HYDROCHLORIC, HYDROFLUORIC ACIDS, POSSIBLE FREE HALOGENS AND CARBONYL HALIDES). CONT CAN RUPTURE UNDER FIRE

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

Spill Release Procedures:VENTILATE AREA, ESPECIALLY LOW AREAS WHERE HEAVY VAPORS MIGHT ACCUMULATE.

T COLLECT. REMOVE HOT METAL SURFACES OR SOURCE OF
NON-EXTINGUISHED FLAMES.

Neutralizing Agent:NONE LISTED.

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

Handling and Storage Precautions:STORE AT TEMP BELOW 125F IN A WELL
VENTILATED AREA STORAGE & HANDLING PRECAUTIONS AS APPLICABLE TO
LIQUIFIED GASES UNDER PRESSURE.

Other Precautions:NONE LISTED.

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

Respiratory Protection:SELF-CONTAINED BREATHIN
G APPARATUS IS REQUIRED

IF A LARGE SPILL OCCURS IN A CONFINED AREA.UNDER NORMAL CONDITIONS
NO RESPIRATORY PROTECTION IS REQUIRED WHEN USING THIS PRODUCT.

Ventilation:LOCAL EXHAUST RECOMMENDED. MECHANICAL REQ IN LOW AREAS
WHERE VAPORS MAY COLLECT.

Protective Gloves:YES WHEN HANDLING LIQUIFIED GAS.

Eye Protection:CHEMICAL SAFETY GOGGLES.

Other Protective Equipment:NONE LISTED.

Supplemental Safety and Health
NONE LISTED.

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

===

Boiling Pt:B.P. Text:25F

Vapor Pres:1758 MM HG

Vapor Density:5.97@68F

Spec Gravity:1.815 G/CC@68F

Evaporation Rate & Reference:LIQUIFIED GAS

Solubility in Water:NON-MISCIBLE

Appearance and Odor:COLORLESS, SLIGHT ETHERAL ODOR.

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

ACTIVE METALS SUCH AS ALUMINUM AND MAGNESIUM, AND FIRES INVOLVING METAL
HYDRIDES.

Stability Condition to Avoid:EXPOS

URE TO FLAMES OR HOT SURFACES ABOVE
850F WILL CAUSE DECOMPOSITION.

Hazardous Decomposition Products:AT TEMP >850F TOXIC FUMES
(HYDROBROMIC, HYDROCHLORIC & HYDROFLUORIC ACIDS.POSSIBLY FREE
HALOGENS & CARBONYL HALIDES).

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

Waste Disposal Methods:COMPLY WITH ALL FEDERAL,STATE AND LOCAL
REGULATIONS. RECLAIM IN SUITABLE VAPOR RECOVERY EQUIPMENT.

Disclaimer (provided with this information by the compiling agencies):

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.