

FLUORINE, LIQUEFIED

MSDS Number

BHBBP

National Stock Number

9135-00-823-8122

Product Name

FLUORINE, LIQUEFIED

Manufacturer

ALLIED SIGNAL INC

Product Identification

Product ID:FLUORINE, LIQUEFIED

MSDS Date:05/01/1986

FSC:9135

NIIN:00-823-8122

MSDS Number: BHBBP

Responsible Party

ALLIED-SIGNAL INC.

MORRISTOWN , NJ 07960

Emergency Phone: (201) 455-4157

Info Phone: (201) 455-4157

Cage: 0B7T5

Contractor

HONEYWELL INTL INC

MORRISTOWN, NJ 07960

US

201-455-2000/800-707-4555

Cage: 0B7T5

Ingredients

FLUORINE (SARA III)

CAS: 7782-41-4

RTECS: LM6475000

Fraction By Weight: 100%

OSHA PEL0.1 PPM

ACGIH TLV: 1 PPM/2 STEL; 9192

EPA Report Quantity: 10 LBS

DOT Report Quantity: 10 LBS

Hazards

LD50 LC50 Mixture:LC50 (IHL-RAT) 185 PPM/1 HR

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

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

Health Hazards Acute and Chronic:INHALATION: IRRITATION OF EYES, NOSE & RESPIRATORY TRACT W/LACRIMATION, COUGHING, SNEEZING, NOSEBLEEDS, LUNGS DAMAGE, PULMONARY EDEMA & BRONCHIAL PNEUMONIA. SKIN: SEVERE THERMAL BURNS & FROSTBITES. EY ES: SEVERE BURNS, CORROSIVE ACTION, BLINDESS, & IRRITATION.

Explanation of Carcinogenicity:NONE

Effects of Overexposure: INHALATION: ABSORPTION OF FLUORIDE ION (MORE THAN 6 MG/DAY) CAN CAUSE FLUOROSIS, INCLUDING MOTTLED ENAMEL OF TEETH, OSTEOSCLEROSIS, & CALCIFICATION OF LIGAMENTS.

First Aid

First Aid: INHALATION: REMOVE PATIENT AT ONCE INTO UNCONTAMINATED ATMOSPHERE/SUMMON PHYS. IF NOT BREATHING, APPLY ARTIFICIAL RESP. OR OXYGEN. KEEP PATIENT WARM BUT NOT HOT. SKIN: REMOVE FROM CONTAMINATED AREA. WASH W/LARGE AMTS OF WATER FOR 15-20 MINS. REMOVE CONTAMINATED CLOTHING. EYES: FLUSH W/LARGE WATER FOR 15-20 MINS. GET MED ATT. ICE-WATER COMPRESSED MAY BE APPLIED.

Fire Fighting

Flash Point: NOT FLAMMABLE

Extinguishing Media: WATER SPRAY/FOG, DRY CHEMICAL.

Fire Fighting Procedures: WEAR SCBA & PROTECTIVE CLOTHING. COOL EXPOSED CONTAINER W/WATER. DON'T DIRECT WATER ONTO FLUORINE LEAKS, AS THE FIRE MAY BE INTENSIFIED.

Unusual Fire/Explosion Hazard: THE GAS FORMS EXPLOSIVE MIXTURES W/WATER, AMMONIA, HYDROGEN, & MOST ORGANIC VAPORS. THESE MAY IGNITE SPONTANEOUSLY.

Accidental Release

Spill Release Procedures: EVACUATE AREA, USE MAXIMUM VENTILATION & ALLOW TO DISSIPATE. AREA MAY LATER BE CLEANED W/DRY, POWDERED SODIUM CARBONATE.

Handling

Handling and Storage Precautions: ALL HANDLING SHOULD FOLLOW ESTABLISHED FORMAL PROCEDURE. LIMIT THE NUMBER OF PERSONNEL IN THE AREA.

OPERATOR SHOULD BE BACKED UP BY ANOTHER PERSON.

Other Precautions: PERSON SHOULD MONITOR OPERATIONS FROM A SAFE BACK-UP POSITION. CONTAINERS ARE STORED OUTDOORS. PROTECT AGAINST PHYSICAL DAMAGE. KEEP AWAY FROM SOURCES OF HEAT/IGNITION/ISOLATED FROM INCOMPATIBLE MATERIALS.

Exposure Controls

Respiratory Protection: HALF/FULL-FACE RESPIRATORS W/GMB CARTRIDGES MAY BE USED FOR CONCENTRATION USE OF SELF-CONTAINED/AIR SUPPLIED RESPIRATORS IS RECOMMENDED.

Protective Gloves: NEOPRENE, BUTYL RUBBER

Eye Protection: SAFETY GLASSES, FULL-FACE SHIELD

Other Protective Equipment: BOOTS OF NEOPRENE, BUTYL RUBBER, ACID SUIT (COAT/OVERALLS). EYEWASH STATION & SHOWER FACILITIES.

Work Hygienic Practices: DON'T WEAR CONTACT LENSES. REMOVE ALL CONTAMINATED CLOTHING.

Supplemental Safety and Health

FLUORINE REACTS W/EVERY ELEMENT EXCEPT ARGON & NEON.

Chemical Properties

Boiling Pt: B.P. Text: -188C

Melt/Freeze Pt: M.P/F.P Text: -219.6C

Vapor Pres: 55

Vapor Density: 1.31

Spec Gravity: 1.108

pH: ACIDIC

Evaporation Rate & Reference: (ETHER = 1): Solubility in Water: DECOMPOSE/REACT

Appearance and Odor: YELLOW GAS, YELLOWISH-GREEN LIQUID, SHARP, ACRID ODOR.

Percent Volatiles by Volume: 100%

Stability

Stability Indicator/Materials to Avoid: YES

OXIDIZABLE MATERIAL. WOOD, ASBESTOS, CONCRETE, FUELS, WATER, METALS, SILICON COMPOUNDS.

Stability Condition to Avoid: METALS REACH SLOWLY W/LOW-PRESSURE FLUORINE AT ROOM TEMPS.

Hazardous Decomposition Products: HYDROFLUORIC ACID, OXYGEN FLUORIDE,

HYDROGEN PEROXIDE, OXYGEN & OZONE.
Conditions to Avoid Polymerization: REACTS VIGOROUSLY W/ORGANIC
MATERIAL, FREQUENTLY CAUSING FIRE.

Disposal

Waste Disposal Methods: CONTROLLED EVAPORATION THROUGH A CHARCOAL BURNER
IS REPORTED TO CONVERT GAS GENERALLY TO CARBON TETRAFLUORIDE.
LARGER QTS MAY BE VENTED TO THE AIR UNDER CONTROLLED CONDITIONS
THROUGH 3-10% POTASSIUM HYDROXIDE SCRUBBING SOLUTIONS. RCRA #P056.

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