

FLUOBORIC ACID 48%

MSDS Number

BLGHH

National Stock Number

6850-00N018997

Product Name

FLUOBORIC ACID 48%

Manufacturer

ENGELHARD CORP

Product Identification

Product ID:FLUOBORIC ACID 48%

MSDS Date:01/24/1989

FSC:6850

NIIN:00N018997

MSDS Number: BLGHH

Responsible Party

ENGELHARD CORPORATION

29001 SOLON ROAD

SOLON , OH 44139

US

Emergency Phone: 216-292-9200

Info Phone: 216-292-9200

Preparer: LMT

Cage: 23036

Contractor

ENGELHARD CORPORATION

SOLON, OH 44139

US

216-292-9200

Cage: 23036

Ingredients

FLUOROBORIC ACID; (BOROFLUORIC ACID HYDROGEN

CAS: 14874-70-5

Fraction By Weight: 48%

OSHA PEL2.5 MG(F)/M3 (MFR)

ACGIH TLV: 2.5 MG(F)/M3 (MFR)

INDUCE VOMIT. CALL MD IMMED. IF UNCON OR IN

RTECS: 9999999ZZ

OR GIVE ANYTHING BY MOUTH TO AN UNCON VICTIM. INHAL

RTECS: 9999999ZZ

PREFERABLY MOUTH-TO-MOUTH. IF BRTHG IS DFCLT, GIVE

RTECS: 9999999ZZ

SEWERS & SURFACE WATERS. NOTIFY AUTHORITIES IF

RTECS: 9999999ZZ

HYDROGEN GAS. STORE AWAY FROM INCOMPAT

RTECS: 9999999ZZ

EXPOSURE LEVELS, MONITORING SHOULD BE PERFORMED

RTECS: 9999999ZZ

ADD FULL LENGTH FACESHIELD TO GOGGLES .

RTECS: 9999999ZZ

Hazards

LD50 LC50 Mixture:LD50: ORL(RAT) 495 MG/KG

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

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

Health Hazards Acute and Chronic:CORROSIVE! EYE: CAUSES SEV BURNS & DESTRUCT OF TISS. SML QTYS CAN RSLT IN PERM DMG & LOSS OF VISION.

SKIN: MAY CAUSE IRRIT & SEV BURNS. INHAL: CAUSES BURNS TO RESP TRACT. INHAL OF DUST/MISTS CAN CAUSE DMG TO THE UPPER RESP TRACT & TO THE LUNG TISS DEPENDING UPON THE EXTENT OF EXPOS. INGEST: CAN CAUSE (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT

Effects of Overexposure:HLTH HAZ: VERY SERIOUS DMG TO THE MOUTH/ESOPHAGUS/STOM, & OTHER TISSUES W/WHICH CONT IS MADE. MAY BE FATAL. OTHER: THERE IS A POSS OF FREE HYDROFLUORIC ACID EXISTING IN SOLN. PRLNG CONT, IN ANY ROUTE OF EXPOS, MAY RSLT IN HYPOCALCEMIA (A DEFICIENCY IN CALCIUM LEVELS IN THE BODY WHICH IF LEFT UNTREATED MAY BE FATAL).

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

First Aid

First Aid:EYE: IMMED FLUSH W/PLENTY OF WATER FOR A MINIMUM OF 15 MIN.

HOLD EYELIDS OPEN DURING THIS FLUSHING W/WATER. CALL MD IMMED.

SKIN: FLUSH AREA W/WATER WHILE REMOVING CONTAM CLTHG/SHOES. FOLLOW BY WASHING W/SOAP & WATER. DO NOT REUSE CLTHG/SHOES UNTIL CLEANED.

IF IRRIT PERSISTS, GET MED ATTN. DO NOT APPLY OILS/OINTMENTS UNLESS ORDERED BY MD. SEEK MED ATTN ASAP FOR ALL BURNS REGARDLESS OF (SUPP DATA)

Fire Fighting

Flash Point:NONE.

Extinguishing Media:WATER SPRAY, DRY CHEMICAL, CO*2, ALCOHOL FOAM.

Fire Fighting Procedures:WEAR NIOSH/MSHA APPRVD SCBA & FULL PROTECTIVE EQUIP . COOL FIRE-EXPOSED CONTRS W/WATER SPRAY. RUN-OFF FROM FIRE CONTROL MAY CAUSE POLLUTION. (SUPP DATA)

Unusual Fire/Explosion Hazard:PRODUCT MAY REACT W/SOME METALS (EX: ALUMINUM, ZINC, TIN, ETC.) TO RELEASE FLAMMABLE HYDROGEN GAS.

Accidental Release

Spill Release Procedures:EVACUATE UNPROT PERS FROM AREA. MAINTAIN ADEQ VENT. USE PROPER SFTY EQUIP. CONTAIN SPILL, PLACE INTO DRUMS FOR PROPER DISP. FLUSH REMAINING AREA W/WATER & NEUTRALIZE W/SODA ASH

OR LIME & DISPOSE OF PR OPERLY. AVOID DIRECT DISCHARGE TO (ING 5)
Neutralizing Agent:SODA ASH OR LIME.

Handling

Handling and Storage Precautions:CORR MATL. STORE IN COOL, WELL-VENT AREA, OUT OF DIRECT SUNLIGHT. KEEP CONTRS TIGHTLY CLOSED. HIGHLY CORR TO MOST METALS W/EVOLUTION OF (ING 6)
Other Precautions:AVOID CONT W/SKIN & EYES. DO NOT SWALLOW. USE W/ADEQ VENT. AVOID PRLNG/RPTD BRTHG OF VAPORS. WASH THOROUGHLY AFTER HANDLING. AVOID DUST OR MIST FORMATION. DO NOT EAT, DRINK, OR SMOKE IN WORK AREA.

Exposure Controls

Respiratory Protection:WHERE MIST/SPRAY IS PRESENT WEAR NIOSH/MSHA APPRVD RESPIRATOR. DO NOT EXCEED LIMITS ESTABLISHED BY THE RESPIRATOR MANUFACTURER.
Ventilation:MAINTAIN ADEQ VENT. DO NOT USE IN CLOSED/CONFINED SPACE. KEEP LEVELS BELOW RECOMM EXPOS LIMITS. TO DETERMINE (ING 7)
Protective Gloves:RUBBER (LATEX), NEOPRENE, PC.
Eye Protection:CHEMICAL WORKERS GOGGLES. (ING 8)
Other Protective Equipment:EYE-WASH STATION. SAFETY SHOWER. RUBBER APRON. CHEMICAL SAFETY SHOES. PROTECTIVE CLTHG. FULL-RUBBER ACID SUIT.
Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING. DO NOT EAT, DRINK, OR SMOKED IN WORK AREA. WASH CONTAM CLTHG/SHOES BEFORE REUSE.
Supplemental Safety and Health
FIRE FIGHT PROC: NEUTRALIZE RUN-OFF W/LIME, SODA ASH, ETC., TO PVNT CORROSION OF METALS & FORMATION OF HYDROGEN GAS. HAZ DECOMP PROD: ARE EVOLVED ON CONT W/CHEM(S) SUCH AS CYANIDES, SULFIDES, CARBIDES , ETC. FIRST AID PROC: HOW MINOR THEY MAY APPEAR INITIALLY. INGEST: IF CONSCIOUS, DRINK A QT OF WATER. DO NOT (ING 2)

Chemical Properties

Boiling Pt:B.P. Text:239F,115C
Melt/Freeze Pt:M.P/F.P Text:-108F,-78C
Spec Gravity:1.38
Solubility in Water:COMPLETE
Appearance and Odor:CLEAR, COLORLESS LIQUID. SHARP, PENETRATING ODOR.

Stability

Stability Indicator/Materials to Avoid:YES
METALS SUCH AS ALUMINUM, ZINC, TIN, ETC., ALKALIES, GLASS, CYANIDES.
Stability Condition to Avoid:AVOID ELEVATED TEMPERATURES.
Hazardous Decomposition Products:HYDROGEN FLUORIDE (HYDROFLUORIC ACID). MAY REACT W/CERTAIN METALS TO PRDCE FLAMM HYDROGEN GAS. HAZ GASES (SUPP DATA)

Disposal

Waste Disposal Methods:OBSERVE ALL LOC, STATE, & FED REGS. DISPOSE OF AT APPRVD WASTE TREATMENT FACILITY. IF APPRVD, NEUTRALIZE MATL & FLUSH TO SEWER. DO NOT PRESSURIZE/CUT/WELD/BRAZE/SOLDER/DRILL/GRIND OR EXPOSE EMPTY CONT RS TO HEAT/FLAME/SPARKS OR OTHER SOURCES OF IGNIT.

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