

ENGLEHARD CORP. SPECIALTY METALS DIV. -- ULTRA FLUX SILVER BRAZING FLUX --
3439-00-051-2834

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Product Identification
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Product ID:ULTRA FLUX SILVER BRAZING FLUX

MSDS Date:02/18/1998

FSC:3439

NIIN:00-051-2834

MSDS Number: CGLBX

=== Responsible Party ===

Company Name:ENGLEHARD CORP. SPECIALTY METALS DIV.

Address:235 KILVERT ST

City:WARWICK

State:RI

ZIP:02886

Country:US

Info Phone Num:800-22

5-2130,401-739-9550

Emergency Phone Num:800-225-2130

CAGE:86337

=== Contractor Identification ===

Company Name:ENGELHARD CORP

Address:235 KILVERT ST

Box:City:WARWICK

State:RI

ZIP:02886

Country:US

Phone:401-739-9550

CAGE:86337

Company Name:NATIONAL TORCH TIP CO INC.

Address:50 FREEPORT RD

City:PITTSBURGH

State:PA

ZIP:15215-2906

Country:US

Phone:412-781-4200

CAGE:93009

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Composition/Information on Ingredients
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Ingred Name:THE PERCENTAGE BY WEIGHT VALUES REPORTED FOR TH

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INGREDIENTS IN THIS PRODUCT REPRESENT APPROXIMATE FORMULATION VALUES.

Ingred Name:POTASSIUM TETRABORATE
CAS:1332-77-0
Fraction by Wt: 30-40%
Other REC Limits:NONE RECOMMENDED

Ingred Name:BORIC ACID
CAS:10043-35-3
RTECS #:ED4550000
Fraction by Wt: 20-30%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:10 MG BORATES/M3
ACGIH TLV:5 MG BORATES/M3

Ingred Name:POTASSIUM BIFLUORIDE (POTASSIUM HYDROGEN FLUORIDE)
CAS:7789-29-9
RTECS #:TS6650000
Fraction by Wt: 20-30%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:2.5 MG/M3 AS F
ACGIH TLV:2.5 MG/M3 AS F

Ingred Name:POTASSIUM PENTABORATE
CAS:11128-29-3
Fraction by Wt: 1-5%
Other REC Limits:NONE RECOMMENDED

Ingred Name:SODIUM DODECYL SULFATE (DODECYL SULFATE, SODIUM SALT)
CAS:151-21-3
RTECS #:WT1050000
Fraction by Wt: 0-0.5%
Other REC Limits:NONE RECOMMENDED

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Fraction by Wt: 10-20%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:NOT RELEVANT
ACGIH TLV:NOT RELEVANT

===== Hazards I

dentification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

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

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

Health Hazards Acute and Chronic:EYES: IRRITATION AND BURNS. SKIN:

FLUORIDE BURNS. MAY BE ABSORBED BY SKIN RESULTING IN SYSTEMIC POISONING. INHALATION: RESPIRATORY AND MUCOUS MEMBRANE IRRITATION. INGESTION: ABDOMINAL PAIN, DIARRHEA, VOMITING, SALIVATION, THIRST, PAINFUL SPASMS OF THE

LIMBS. LARGE AMOUNTS MAY BE FATAL.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:EYES: IRRITATION, BURNS. SKIN: BURNS NOT

IMMEDIATELY PAINFUL OR EVIDENT, SYSTEMIC POISONING. INHALATION: RESPIRATORY AND MUCOUS MEMBRANE IRRITATION, NASAL DISCHARGE, NOSEBLEED, SORE THROAT, SYSTEMIC TOXICITY. INGESTION: ABDOMINAL PAIN, DIARRHEA, VOMITING, SALIVATION, THIRST, PERSPIRATION, SPASMS. LARGE AMOUNTS MAY BE FATAL.

Medical Cond Aggravated by Exposure:MAY ADVERSELY AFFECT EXISTING

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MEDICAL CONDITIONS SUCH AS EYE, SKIN, RESPIRATORY, LIVER AND/OR KIDNEY AILMENTS, AND CENTRAL NERVOUS SYSTEM DISORDERS.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. DO NOT USE ZEPHIRAN CHLORIDE SOLUTIONS IN EYES. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. FLUSH SKIN WITH WATER. GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR. IF BREATHING DIFFICULT

GIVE OXYGEN. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. GIVE LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION.

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

Extinguishing Media:USE WATER SPRAY, DRY CHEMICAL, ALCOHOL FOAM, OR CARBON DIOXIDE. USE WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL.

Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING AS SPECIFIED IN 29 CFR 1

910.156.

Unusual Fire/Explosion Hazard:NOT A FIRE OR EXPLOSION HAZARD. HOWEVER, TOXIC AND CORROSIVE FLUORIDE COMPOUNDS MAY BE RELEASED IN A FIRE SITUATION.

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

Spill Release Procedures:CONTAIN SPILL BY DIKING. VENTILATE AREA. SOAK UP SPILL USING AN ABSORBENT. SCOOP INTO CONTAINER. NOTIFICATION OF NATIONAL RESPONSE CENTER MAY BE REQUIRED. REFER TO EPA, DOT AND APPLICABLE STATE AND LOCAL REGULATIONS FOR CURRENT RESPONSE INFORMATION.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN COOL, DRY AREA AWAY FROM INCOMPATIBLE MATERIALS. USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH DUSTS, MISTS, FUMES RESULTING FROM PRODUCT USE.

Other Precautions:DO NOT EAT, DRINK, OR SMOKE IN WORK AREA. KEEP CONTAINER CLOSED. WASH THOROUGHLY AFTER HANDLING.

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

Respiratory Protection:IF THERE IS A POTENTIAL TO EXCEED THE TLV, NIOSH/MSHA APPROVED RESPIRATORY PROTECTION IS REQUIRED. IF RESPIRATOR PROTECTION IS USED, FOLLOW ALL REQUIREMENTS FOR RESPIRATOR PROGRAMS SET FORTH IN THE OSHA REGULATIONS (29 CFR 1910.134).

Ventilation:PROVIDE GENERAL VENTILATION AND/OR LOCAL EXHAUST VENTILATION AS NECESSARY TO CONTROL AIR CONTAMINANTS WITHIN PELLS/TLVS.

Protective Gloves:USE RUBBER OR NEOPRENE GLOVES.

Eye Protection:

WEAR CHEMICAL GOGGLES.

Other Protective Equipment:WEAR BODY PROTECTION AS NECESSARY TO PREVENT SKIN CONTACT. REFER TO ANSI/ASC Z49.1-94 FOR INFO ON PROTECTION EQUIPMENT.

Work Hygienic Practices:WASH AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

THIS PRODUCT DOES NOT CONTAIN TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND

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

HCC:B3

Melt/Freeze Pt:M.P/F.P Text:792F,422C

Spec Gravity:1.49

pH:8.8

Solubility in Water:COMPLETE

Appearance and Odor:WHITE PASTE

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

Stability Indicator/Materials to Avoid:YES

STRONG ACIDS AND ALKALIES.

Stability Condition to Avoid:TEMPERATURES AT OR ABOVE 225C.

Hazardous Decomposition Products:EMITS TOXIC AND

CORROSIVE FLUORIDE

COMPOUNDS. MAY ALSO EMIT OXIDES OF BORON AND POTASSIUM WHEN HEATED TO DECOMPOSITION.

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

Waste Disposal Methods:DISPOSE OF WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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