

MATERIAL SAFETY DATA SHEET

CODE: M/L 1139

This Material Safety Data Sheet complies with the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200



**PRODUCT: LENOX® HIGH ACTIVITY STAINLESS
STEEL LIQUID FLUX (Inorganic Acid Soldering Flux)**

NFPA/HMIS HAZARD CODES: HEALTH: 3 FIRE: 0 REACTIVITY: 0 SPECIAL: N/A

0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

SECTION I IDENTIFICATION

SUPPLIER NAME: LENOX® 1690 Lowery Street
Winston-Salem, NC 27101
ISSUE DATE: May, 2007
INFORMATION PHONE: 336-777-8600

SECTION II COMPOSITION INFORMATION

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>US OSHA PEL</u>	<u>%</u>
Ammonium Bifluoride	1341-49-7	2.5 PPM	3-6
Ammonium Chloride	12125-02-9	NA	4-15
Hydrochloric Acid	7647-01-0	5.0 PPM	3-15
Zinc Chloride	7646-85-7	1 PPM	30-45

PEL = PERMISSABLE EXPOSURE LIMIT

Unlisted percentages are non-hazardous stabilizers, activators, and water.

None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

SECTION III HEALTH HAZARDS

EYES: Flush with water for 10 minutes. Obtain immediate medical attention.
SKIN: Wash thoroughly with water. If irritation develops, obtain medical attention.
ACUTE INHALATION: Remove to fresh air. Obtain immediate medical attention.
INGESTION: If patient is fully conscious, give two glasses of water and induce vomiting. Obtain immediate medical attention.
PRIMARY ROUTES OF ENTRY: Fume inhalation, ingestion, skin and eyes.
SYMPTOMS OF OVEREXPOSURE: Pulmonary edema, abdominal pain, vomiting, eye damage and skin burn.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY OVEREXPOSURE: None presently known.
CHEMICAL LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN: None
OSHA Permissible Exposure Limit (PEL): 1 PPM
ACGIH Threshold Limit Value (TLV): 1 PPM

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A
FLAMMABLE LIMITS: N/A
EXTINGUISHING MEDIA: Dry chemical, CO2 foam
AUTO IGNITION TEMPERATURE: None
SPECIAL FIRE FIGHTING PROCEDURES: Normal cautious when dealing with chemicals.
UNUSUAL FIRE & EXPLOSION HAZARDS: Will release small amounts of HC1 upon decomposition.

SECTION V ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED: First neutralize with Soda Ash or Sodium Bicarbonate; dilute with water and dispose of in accordance with EPA regulations.

SECTION VI HANDLING AND STORAGE

STORAGE REQUIREMENT: Store in plastic containers in cool area, away from heat. Do not store in glass or porcelain container. Wash thoroughly after use.

HANDLING PRECAUTIONS: Safe precautionary practices - avoid spills and exposure to skin and fumes.

SECTION VII CONTROL MEASURES

RESPIRATORY PROTECTION (TYPE): NIOSH approved respirator
MECHANICAL (GENERAL): Yes
EYE PROTECTION: Safety glasses/goggles
PROTECTIVE GLOVES: Recommended, NIOSH approved
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Rubber apron, or equivalent
VENTILATION: Yes
LOCAL EXHAUST: Yes

SECTION VIII PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT:	104°C/220°F	SPECIFIC GRAVITY (WATER=1):	1.50
VAPOR PRESSURE (mm Hg):	N/A	PERCENT VOLATILE BY VOLUME:	55%
VAPOR DENSITY (AIR=1):	N/A	EVAPORATION RATE (BUTYL ACETATE=1):	0.6
MELTING POINT:	0°C/32°F	SOLUBILITY IN WATER:	Unlimited
REACTIVITY IN WATER:	None	APPEARANCE AND ODOR:	Clear, odorless liquid

SECTION IX STABILITY AND REACTIVITY

STABILITY: Product is stable
(CONDITIONS TO AVOID): Metals
INCOMPATIBILITY: Alkaline, Strong Oxidizing or Reducing Materials, Cyanides or Combustible Materials.
HAZARDOUS DECOMPOSITION PRODUCTS: HC1, Zinc Chloride, Zinc Oxide, Ammonium
HAZARDOUS POLYMERIZATION: Will not occur
(CONDITIONS TO AVOID): Excessive heat or cold

SECTION X TRANSPORTATION AND DISPOSAL CONSIDERATIONS

D.O.T. PROPER SHIPPING NAME: Corrosive Liquid, Acidic, Inorganic, N.O.S.
Contains Zinc Chloride, Hydrochloric Acid

HAZARD CLASS: 8
IDENTIFICATION NUMBER: UN3264
PACKING GROUP: III
TYPE DOT LABEL REQUIRED INFO: Corrosive
WASTE DISPOSAL METHOD: Dispose of in accordance with EPA regulations

SECTION XI OTHER INFORMATION

VOC CONTENT: None

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