Material Safety Data Sheet

MSDS Form No. : MSDS24959
Item No. : 24959

**** MATERIAL SAFETY DATA SHEET ****

SOLDERING PASTE FLUX

Part # MSDS24959

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: SOLDERING PASTE FLUX
Product CAS: (none)
Product Code:
Synonyms: 24959; SOLDERING PASTE FLUX
Company Identification:
Name: BOWMAN DISTRIBUTION
Address: 1301 E. 9TH ST., ST. 700
Address:
City: CLEVELAND State: OH Zip: 44114
For information, call: 216-416-7200
Emergency Number: 24 HR: 303-623-5716
Emergency Agency:
Number:
MSDS Creation Date: 1/1/2005
Supersedes Date: 1/1/2003
Miscellaneous:
CHEMICAL FAMILY: MIXTURE

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZINC CHLORIDE FUME</td>
<td>7646-85-7</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

Miscellaneous:
CHEMICAL NAME(S): ZINC CHLORIDE FUME
% W: 10-25
OSHA PEL: 1 MG/CUM
ACGIH TLV: 1 MG/CUM
OTHER LIMITS: 2 MG/CUM

* ALL CHEMICAL COMPOUNDS MARKED WITH AN ASTERISK (*) ARE TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

Lbs of VOC per Gallon Coating (minus water): 0
Coating Density (lbs/gal): 0
Solvent Density (lbs/gal): 0
Percent Solvent (volume): 0
Percent Solids (volume): 0
Percent Water (volume): 0

**** SECTION 3 – HAZARDS IDENTIFICATION ****

NFPA: Health: 2 Fire: 1 Reactivity: 0 Other:
HMIS: Health: Fire: Reactivity: Special Protection:

Miscellaneous:
HMIS RATINGS –
HEALTH: N.E.
FLAMMABILITY: N.E.
REACTIVITY: N.E.
PERSONAL PROTECTION: N.E.

POTENTIAL HEALTH EFFECTS

Target Organs:
PRIMARY ROUTES OF ENTRY: INHALATION, SKIN CONTACT, INGESTION.

Eye:
HEALTH HAZARDS (ACUTE AND CHRONIC – INCLUDE TARGET ORGAN EFFECTS): ZINC CHLORIDE IS A TOXIC AND SEVERE EYE IRRITANT.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: MAY BURN EYE SURFACES.

Skin:
HEALTH HAZARDS (ACUTE AND CHRONIC – INCLUDE TARGET ORGAN EFFECTS): ZINC CHLORIDE IS A TOXIC AND SEVERE SKIN IRRITANT.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: NOT CLASSIFIED AS A SKIN ABSORBENT. CONTACT WITH SKIN MAY CAUSE DERMATITIS.

Ingestion:
SIGNS AND SYMPTOMS OF OVEREXPOSURE: CHEMICAL BURN TO DIGESTIVE SYSTEM. MAY BE FATAL IF SWALLOWED.
Inhalation:
HEALTH HAZARDS (ACUTE AND CHRONIC – INCLUDE TARGET ORGAN EFFECTS): ZINC CHLORIDE IS A TOXIC AND SEVERE PULMONARY IRRITANT.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: IRRITANT TO RESPIRATORY SYSTEM WHEN HEATED.

Miscellaneous:
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: UNKNOWN.

**** SECTION 4 - FIRST AID MEASURES ****

Eye:
FLUSH WITH LARGE AMOUNT OF WATER LIFTING UPPER AND LOWER LIDS OCCASIONALLY. GET MEDICAL ATTENTION.

Skin:
WASH EXPOSED AREA WITH SOAP AND WATER.

Ingestion:
DO NOT INDUCE VOMITING. IF SWALLOWED GIVE 1–2 GLASSES OF WATER OR MILK AND TAKE PATIENT TO HOSPITAL IMMEDIATELY.

Inhalation:
IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN.

Notes to Physician:

**** SECTION 5 - FIRE FIGHTING MEASURES ****

Unusual Fire and Explosion Hazards:
NONE

Special Fire Fighting Procedures:
NONE

Extinguishing Media:
DRY CHEMICAL OR CARBON DIOXIDE.

Flash Point:
GT 400 F; METHOD USED: C.O.C.

Flammable Limits:
Lower Limit:
LEL: N.E.
Upper Limit:
UEL: N.E.
AutoIgnition Temperature:
N/A

General Information:

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

Disposal:
MUST BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

Spills/Leaks:
PRODUCT IS IN PASTE FORM. USING ACID RESISTANT GLOVES, WIPE UP AND CLEAN WITH SOAP AND WATER.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:
OBSERVE PRECAUTIONS FOR ACIDIC MATERIAL. KEEP CONTAINER CLOSED WHEN NOT IN USE.
READ ALL CONTAINER LABELING.

Storage:

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
VENTILATION -
LOCAL EXHAUST (SPECIFY RATE): PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST).

Eyes:
(SPECIFY TYPE): SAFETY GLASSES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED.
PROVIDE EYE BATH WORK NEAR SITE.

Skin:

Clothing:

Respirators:
(SPECIFY TYPE): IF THRESHOLD LIMIT VALUE IS EXCEEDED, WHEN HEATED, USE MSHA/NIOSH APPROVED RESPIRATOR.
**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Appearance/Odor:
AMBER COLOR, SOLID PASTE, NEGLIGIBLE ODOR.

pH: N.A.
Vapor Pressure: N.A.
Vapor Density: (AIR=1): N.A.
Evaporation Rate: (ETHER=1): N.A.
Viscosity: N.A.
Boiling Point: N.A.
Freezing/Melting Point: N.A.
Decomposition Temperature: N.A.
Solubility: IN WATER: N.A.
Specific Gravity: 1
Molecular Formula: PROPRIETARY
Molecular Weight: N.A.
Miscellaneous:
SPECIFIC GRAVITY (H2O=1): N.A.

PERCENT VOLATILE BY VOLUME (%): N.A.

MAXIMUM PERCENT VOC BY WEIGHT (%): METHOD USED - CALCULATED.

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
STABLE

Conditions to Avoid:
STABILITY/HAZARDOUS POLYMERIZATION: NONE.

Incompatibilities with Other Materials:
STRONG OXIDIZING AGENTS AND ALKALIS.

Hazardous Decomposition Products:
BURNING MAY PRODUCE CARBON MONOXIDE, CARBON DIOXIDE AND CHLORIDE FUME.

Hazardous Polymerization:
WILL NOT OCCUR

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

Toxicological Information:
NO DATA
**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecological Information:
NO DATA

**** SECTION 13 - OTHER PRECAUTIONS ****

Other Precautions:
CONTAINERS: SINCE EMPTY CONTAINERS MAY RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, OR SOLID) ALL LABELED HAZARD PRECAUTIONS MUST BE OBSERVED. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

Work/Hygienic Practices:

**** SECTION 14 - TRANSPORT INFORMATION ****

Transportation Information:
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101): NOT REGULATED.

ADDITIONAL HAZARD CLASSES (AS APPLICABLE): NOT REGULATED.

Label Information:

**** SECTION 15 - REGULATORY INFORMATION ****

Regulatory Information:
NO DATA

**** SECTION 16 - ADDITIONAL INFORMATION ****

Additional Information:
N.A. - NOT APPLICABLE
N.E. - NOT ESTABLISHED
N.D. - NOT DETERMINED