

SAFETY DATA SHEETS

This SDS packet was issued with item:

077668510

N/A

MATERIAL SAFETY DATA SHEET**YATES & BIRD/MOTLOID COMPANY**

300 North Elizabeth Street Chicago, IL 60607
312-226-2412 or 312-226-2454

July 1, 2003

Reviewed Dec 4, 2006

IN EMERGENCY CONTACT:**INFOTRAC: 800-535-5053****Outside USA: 352-353-3500****SECTION I PRODUCT IDENTIFICATION**PRODUCT NAME: **MIRAFLUX**

GENERIC NAME: SILVER BRAZING PASTE FLUX

SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENT	CAS #	%	OSHA PEL (Units)	ACGIH TLV (Units)
POTASSIUM FLUOROHYDROBORATE	14075-53-7	30-45	2.5 Mg/m ³	
POTASSIUM TETRABORATE	1332-77-0	15-25	5.0 Mg/m ³	
BORIC ACID	10043-35-3	15-30	10.0 Mg/m ³	
POTASSIUM FLUOBORATE	14075-53-7	7-15	2.5 Mg/m ³	

SECTION III PHYSICAL DATA

VAPOR DENSITY (air=1): NA BOILING POINT: NA VAPOR PRESSURE (mm Hg): NA
MELTING POINT: NA SOLUBILITY IN WATER: Moderate EVAPORATION RATE
(water=1): 0.3
REACTIVITY IN WATER: None % VOLATILE BY VOLUME: 30 SPECIFIC GRAVITY (H₂O=1): 1.6
APPEARANCE/ODOR: White odorless paste

SECTION IV FIRE, EXPLOSION AND REACTIVITY INFORMATION

FLASH POINT (AND TEST METHOD): None AUTOIGNITION TEMPERATURE: None
FLAMMABLE LIMITS IN AIR % BY VOLUME: NA EXTINGUISHING MEDIA: Not needed
SPECIAL FIREFIGHTING PROCEDURES: Normal caution when dealing with flux chemicals
UNUSUAL FIRE AND EXPLOSION HAZARDS: None
INCOMPATIBILITY(MATERIALS TO AVOID): Glass or porcelain
HAZARDOUS DECOMPOSITION PRODUCTS: Total fluorides, maximum 0.42 Mg/m³
STABILITY: Stable. Conditions to avoid: Excess heat
HAZARDOUS POLYMERIZATION: NA. Conditions to avoid: NA

SECTION V HEALTH HAZARD INFORMATION

PRIMARY ROUTES OF EXPOSURE: Inhalation, ingestion, skin
SIGNS/SYMPTOMS OF EXPOSURE: Acute overexposure: Salivation, coughing, choking and chills. Chronic overexposure: May cause weight loss, brittle bones, anemia and weakness.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Any weakness of the lungs, kidneys or liver.
HEALTH HAZARDS: Chemical listed as carcinogen or potential carcinogen: National Toxicology Program: NO. IARC Monographs: NO. OSHA: NO. OSHA PEL: 2.5 Mg/m³. ACGIH TLV: 2.5 Mg/m³
EMERGENCY AND FIRST AID PROCEDURES: Inhalation: Remove victim to fresh air. Artificial respiration. If necessary, call physician. Eye contact: Flush with water for 15 minutes. Call physician. Ingestion: Drink water or milk and contact a physician immediately. Skin contact: Wash with soap and water promptly.

SECTION VI ENVIRONMENTAL PROTECTION INFORMATION

IF MATERIAL IS RELEASED/SPILLED: Clean up paste and flush remaining material with lots of water.
WASTE DISPOSAL METHOD: Dispose in accordance with local and state EPA regulations. Place in a disposal facility approved under RCRA regulations for hazardous waste.

SECTION VII CONTROL MEASURES

RESPIRATORY PROTECTION: NIOSH approved respirator in absence of proper ventilation. GLOVES: Neoprene or rubber. EYES: Chemical safety goggles. OTHER: Wear protective clothing to prevent skin contact. Rubber apron suggested. VENTILATION: Yes. Local: Yes. Mechanical (general): Yes.

SECTION VIII SPECIAL PRECAUTIONS

HANDLING/STORAGE: Do not store in glass or porcelain containers. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. WORK/HYGIENIC PRACTICES: Wash skin and clothing well, especially before eating. OTHER: Minimize skin contacts and inhalation. Keep container away from excessive heat.

SECTION IX TRANSPORTATION

DOT PROPER SHIPPING NAME: NA HAZARD CLASS: NA ID#: NA
PACKING GROUP: NA TYPE DOT LABEL REQUIRED: NA

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Revision Date: November 11, 2015

SECTION I PRODUCT AND COMPANY IDENTIFICATION

Product Identifiers

Product Name: Miraflox
Product Code: 42880
Chemical Family: Silver Brazing Paste Flux

Details of the Supplier of the Safety Data Sheet

Supplier Name:

Yates Motloid

Supplier Address

300 N. Oakley Blvd.
Chicago, IL 60612
Website: www.yates-motloid.com
E-mail: sales@yates-motloid.com

Emergency Telephone Numbers

Company Phone Number: (312) 226-2473 (During Business Hours, 8:00am - 4:00pm CST)

Emergency Telephone: INFOTRAC: 1-800-535-5053 (Outside U.S. 1-352-323-3500)

SECTION II HAZARDS IDENTIFICATION

Classification (CLP): N/A

Label elements (CLP): N/A



Warning

Risk Phrases: R62, R25, R36/37/38, R60/61

Safety Phrases: S-26, S-27, S-36/37/39, S-45

See section XVI for full text description of S and R phrases

Other Hazards: None if used properly

SECTION III COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	%	OSHA PEL
Potassium Fluorohydroborate	12228-71-6	20-40	2.5 mg/m ³
Potassium Tetraborate	1332-77-0	15-25	5.0 mg/m ³
Boric Acid	10043-35-3	30-45	10 mg/m ³
Potassium Fluoborate	14075-53-7	7-15	2.5 mg/m ³

SECTION IV FIRST AID MEASURES

Inhalation: Remove to fresh air

Eyes: Flush with water for 15 minutes. Call physician.

Skin: Wash thoroughly with soap and water.

Ingestion: If patient is fully conscious, give large amounts of water. Obtain medical attention immediately.

Most Important Symptoms and Effects, Both Acute and Delayed

Primary Routes of Entry into Body: Fume inhalation, ingestion, skin, and eyes.

Symptoms of overexposure: Salivation, coughing, choking, chills, may cause weight loss, brittle bones, anemia, and stiff joints.

Medical Conditions Generally Aggravated by Exposure: Any weakness of the lungs, kidneys, or liver will be aggravated.

Chemical Listed as Carcinogen or Potential Carcinogen: None

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OSHA Permissible Exposure Limit (PEL): 2.5 mg/m³

ACGIH Threshold Limit Value (TLV): 2.5 mg/m³

SECTION V FIRE-FIGHTING MEASURE

Flash Point (Method Used): None

Flammable Limits: Lower- NA, Upper-NA

Extinguishing Media: Not Needed

Auto Ignition Temperature: None

Special Fire Fighting Procedures: Normal caution when using chemicals

Unusual Fire and Explosion Hazards: Fluorides

SECTION VI ACCIDENTAL RELEASE MEASURES

Steps to be taken in case Material is spilled: Clean up paste and flush remaining material with lots of water.

SECTION VII HANDLING AND STORAGE

Precautions to be taken in Handling and Storage: Store in plastic containers in cool area. Do not store in glass or porcelain container. Wash thoroughly after use.

Work/Hygienic Practices: Avoid contact with skin, eyes, and clothing.

Other Precautions: Keep container away from excessive heat.

SECTION VIII EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Yes

Local Exhaust: Yes

Eye protection: Safety goggles

Protective Gloves: Recommend, NIOSH approved

Mechanical (General): Yes

Respiratory Protection (Type): NIOSH approved respirator

Other Protective Clothing or Equipment: Rubber apron

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A

Specific Gravity (Water = 1): 1.6

Vapor Pressure (mm Hg): N/A

Percent Volatile by Volume: 30%

Vapor Density (Air = 1): N/A

Evaporation Rate (Butyl Acetate = 1): 0.3

Melting Point: 932°F (500°C)

Solubility in Water: Moderate

Reactivity in Water: None

Appearance and Odor: White, odorless paste

SECTION X STABILITY AND REACTIVITY

Reactivity:	Product is stable
Incompatibility:	Glass or porcelain
Conditions to Avoid:	Excess heat
Hazardous Decomposition products:	Fluorides with high heat
Hazardous Polymerization:	Will not occur

SECTION XI TOXICOLOGICAL INFORMATION

Acute Toxicity Data:

Oral: LD-50 (rat): Not available

Inhalation: LD-50 (rabbit): Not available

Dermal: LD-50 (rabbit): Not available

Skin Irritation: (rabbit): Not available

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Chronic Toxicity Data:

Repeated Skin Application: (rat): Not available

Eye Irritation: (rabbit): Not available

SECTION XII ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.

SECTION XIII DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with EPA regulations

SECTION XIV TRANSPORT INFORMATION

D.O.T. Proper Shipping Name: Non-Hazardous

Hazard Class: N/A

Identification Number: N/A

Packing Group: N/A

Type D.O.T Label Required Information: N/A

SECTION XV REGULATORY INFORMATION

OSHA Hazardous Chemical According to 29 CFR 1910.1200: None

Carcinogenicity Classification (Components Present at 0.1% or More): Non-carcinogenic

International Agency for Research on Cancer (IARC): Not listed

American Conference of Governmental Industrial Hygienists (ACGIH): Not listed

National Toxicology Program (NTP): Not listed

Occupational Safety and Health Administration (OSHA): Not listed

None of the components of this product are listed on the U.S. toxic substances control act inventory or otherwise comply with TSCA pre-manufacture notification requirements.

SECTION XVI OTHER INFORMATION

The labeling of this product is indicated in Section II. The full text of all abbreviations indicated by codes in the SDS are as follows:

R25	Toxic if swallowed
R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin
R60/61	May cause infertility/May cause harm to unborn child
R62	Possible risk of impaired fertility
S-26	In case of eye contact, rinse thoroughly and get medical attention
S-27	Take off immediately contaminated clothing
S-36/37/39	Wear suitable protective clothing, gloves, and eye/face protection
S-45	In case of accident or if feel unwell call medical advice immediately
H361f	Suspected of damaging fertility

Further information:

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