

**Fine Proofing Alloy – Item No. 16117  
MATERIAL SAFETY DATA SHEET**

**SECTION 1 – MANUFACTURER INFORMATION**

MANUFACTURER: FLEXBAR MACHINE CORPORATION  
250 GIBBS ROAD  
ISLANDIA, NY 11749  
631-582-8440

EMERGENCY PHONE: CHEMTREC 800-424-9300

PREPARATION/REVISION DATE: 11-01-2010

PRODUCT NAME(S): **Fine Proofing Alloy – Item No. 16117**  
CHEMICAL FAMILY: ALLOY  
CONDITION: SOLID

**HAZARDOUS MATERIAL IDENTIFICATION SYSTEM**

HEALTH.....3  
FLAMMABILITY....1  
REACTIVITY.....0  
PROTECTION.....2

**SECTION 2 – HAZARDOUS INGREDIENTS**

This product contains hazardous ingredients: YES

CHEMICAL	CAS-NUMBER	Weight %	PEL-OSHA	TLV-ACGIH
BISMUTH	7440-69-9	40-45	N/A	N/A
CADMIUM	7440-43-9	5-10	0.005 mg/m <sup>3</sup>	0.005 mg/m <sup>3</sup>
INDIUM	7440-74-6	15-20	N/A	0.1 mg/m <sup>3</sup>
LEAD	7439-92-1	20-25	0.05 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
TIN	7440-31-5	5-10	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>

This product may contain one or more chemicals subject to toxic chemical release reporting requirements of Section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA) of 1986 and CFR Part 372.

This product contains carcinogens (NTP, IARC, OR OSHA): YES

CHEMICAL	CAS-NUMBER	NTP	IARC	OSHA
CADMIUM	7440-43-9	XXX		XXX
LEAD	7439-92-1	XXX		

### **SECTION 3 – HEALTH HAZARD DATA**

#### **HEALTH EFFECTS (ACUTE AND CHRONIC) –**

**BISMUTH:** Bismuth and bismuth compounds have little or no effect on intact skin and mucous membrane. Chronic intoxication from repeated oral or parenteral doses causes “bismuth line”. This is a gum condition with black spots of buccal and colonic mucosa, superficial stomatitis, foul breath and salivation

**CADMIUM:** Inhalation of dust or fumes may cause dryness of the throat, cough, headache, a sense of constriction in the chest, shortness of breath and persistent cough and chest pain. Cadmium dust is listed as a carcinogen in the Rhode Island list of designated substances.

**INDIUM:** Overexposure to indium may affect the lungs, kidneys, blood, liver, and the pulmonary system. Indium has shown teratogenic effects.

**LEAD:** Depending upon individual susceptibility and degree of overexposure, effects are generally only seen after long-term exposure. Early symptoms of lead intoxication include constipation, insomnia, gastrointestinal disorders, anemia, weakness, and joint pain. Overexposure to lead may have effects on the reproductive system of both men and women. Persons that intend to have children and pregnant women in particular should maintain a blood level of less than 30µg/100g of blood.

**TIN:** Overexposure to fumes of tin (oxide) results in stannosis, a benign pneumoconiosis.

**PRIMARY ROUTES OF ENTRY** – Nose, Mouth, Eyes And Skin.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE** – See Health Effects – Acute And Chronic.

**EMERGENCY FIRST AID PROCEDURES** – If Molten Metal Contacts Skin Or Eyes, Irrigate Immediately With Cold Water, Seek Medical Assistance.

### **SECTION 4 – CHEMICAL DATA**

BOILING POINT (F)	>2000	SPECIFIC GRAVITY (WATER=1)	7.5
VAPOR PRESSURE (mmHg)	<10-5	PERCENT VOLATILE BY VOLUME (%)	0
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (BUTYL ACETATE =1)	<1

SOLUBILITY IN WATER – Negligible

APPEARANCE AND ODOR INFORMATION - Metallic Color, Odorless

### **SECTION 5 – PHYSICAL HAZARD DATA**

**FLASH POINT:** Non-Flammable    **FLAMMABLE LIMITS:** N/A

**EXTINGUISHER MEDIA** – Dry Chemical, Carbon Dioxide.

**SPECIAL FIRE FIGHTING PROCEDURES** –  
DO NOT USE WATER ON MOLTEN ALLOY – DANGER OF EXPLOSION

**UNUSUAL FIRE OR EXPLOSION HAZARDS** – N/A

**INCOMPATIBILITY (MATERIALS TO AVOID)** –  
OXIDIZERS, ACIDS, HALOGENATED ACIDS. KEEP WATER AWAY FROM MOLTEN ALLOY.

**HAZARDOUS DECOMPOSITION PRODUCTS** – N/A

**WILL HAZARDOUS POLYMERIZATION OCCUR** – WILL NOT OCCUR.

**CONDITIONS TO AVOID FOR POLYMERIZATION – N/A**

**IS THE PRODUCT STABLE – STABLE**

**CONDITIONS TO AVOID FOR STABILITY – N/A**

### **SECTION 6 – SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED** – Normal solid clean up procedures. Avoid making dust.

**WASTE DISPOSAL METHODS** – Dispose of According to Local, State, or Federal Hazardous Waste Regulations.

### **SECTION 7 – EXPOSURE CONTROL INFORMATION**

**VENTILATION –**

LOCAL EXHAUST: Recommended      MECHANICAL (GENERAL): Recommended  
SPECIAL: Avoid Ingestion              OTHER: N/A

**RESPIRATORY PROTECTION** – NIOSH or MSHA Approved Respiratory Protection.

**PROTECTIVE GLOVES** – Heat resistant.

**OTHER PROTECTIVE EQUIPMENT** – Eye Protection, Safety Shoes – While Grinding, Polishing, Or Melting, and Local Exhaust Ventilation is recommended.

**OTHER ENGINEERING CONTROLS** – N/A

**WORK PRACTICES** – Do not smoke, eat, drink or apply cosmetics in work area. Do not use near food or eating areas. Avoid making dust.

**HYGIENIC PRACTICES –**

Wash hands before eating or drinking, do not smoke, drink, eat or apply cosmetics in work area. Do not use near food or eating area. Avoid making dust.

### **SECTION 8 – SPECIAL PRECAUTIONS**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE** – Do not smoke, eat, drink or apply cosmetics in work area. Do not use near food or eating areas. Avoid making dust.

**MAINTENANCE PRECAUTIONS** – N/A

**OTHER PRECAUTIONS** – When OSHA permissible exposure limits (PEL) are exceeded, special clothing, ventilation, respirators, sampling, etc., may be required.

**ADDITIONAL COMMENTS** – While the information and recommendations set forth above are believed to be accurate as of the date hereof, Flexbar Machine Corporation makes no warranty with respect thereto and disclaims all liability or action based thereon.