



MATERIAL SAFETY DATA SHEET

Page 1 of 5
Revised 7/25/02
Replaces (None)
Printed 7/25/02
MSDS ID: HI FLO

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HI FLO

MANUFACTURER'S NAME: ALPHA METALS, INC
ADDRESS: 600 ROUTE 440
JERSEY CITY, NJ 07304
TRANSPORT EMERGENCY #: CHEMTREC: 1-800-424-9300
BUSINESS PHONE: 1-201-434-6778

CHEMICAL NAME	CAS #	% W/W	OSHA PEL - TWA
LEAD	7439-92-1	30-40	0.05mg/m3
TIN	7440-31-5	60-70	2.0 mg/m3

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: MODERATE EYE IRRITANT.
WILL NOT BURN
TOXIC BY INHALATION.
MODERATE GASTROINTESTINAL TRACT IRRITANT.
MODERATE RESPIRATORY TRACT IRRITANT.
CAUSES SKIN IRRITATION

HMIS RATING SYSTEM:
Health: 2 ; Flammability: 1 ; Reactivity: 0 ; Protection: B

NFPA RATING SYSTEM:
Health: 2 ; Flammability: 1 ; Reactivity: 0

ROUTES OF ENTRY: INHALATION; INGESTION; SKIN CONTACT; EYE CONTACT;
ABSORPTION.

TARGET ORGANS: BLOOD; DIGESTIVE TRACT; KIDNEYS; NERVOUS SYSTEM
MEDICAL CONDITIONS AGGRAVATED: DIGESTIVE TRACT DISEASE; KIDNEY DISEASE

IMMEDIATE (ACUTE) SYMPTOMS OVER-EXPOSURE BY ROUTE OF EXPOSURE:
INHALATION: CAN CAUSE MODERATE RESPIRATORY IRRITATION, DIZZINESS,
WEAKNESS, FATIGUE, NAUSEA AND HEADACHE.
EYES: CAN CAUSE MODERATE IRRITATION, TEARING AND REDDENING, BUT
NOT LIKELY TO PERMANENTLY INJURE EYE TISSUE.
SKIN CONTACT: CAN CAUSE SLIGHT IRRITATION.
INGESTION: IRRITATING TO MOUTH, THROAT, AND STOMACH. CAN CAUSE
ABDOMINAL DISCOMFORT, NAUSEA, VOMITING AND DIARRHEA.

LONG TERM (CHRONIC) HEALTH EFFECTS:
CARCINOGENICITY: NONE OF THE SUBSTANCES IN THIS PRODUCT ARE CONFIRMED AS
HUMAN CARCINOGENS AT THIS TIME BY NTP, IARC, OR OSHA. IARC
CLASSIFIES LEAD AND SOME LEAD COMPOUNDS AS 2B CARCINOGENS TO
HUMANS). AGCIH LISTS AS LEAD AS A "A3, (ANIMAL CARCINOGEN



MATERIAL SAFETY DATA SHEET

Page 2 of 5
Revised 7/25/02
Replaces (None)
Printed 7/25/02
MSDS ID: HI FLO

3. HAZARDS IDENTIFICATION (Cont.)

WITH UNKNOWN RELEVANCE TO HUMANS).
REPRODUCTION: NO DATA AVAILABLE TO INDICATE PRODUCT OR ANY COMPONENTS PRESENT AT GREATER THAN 0.1% MAY CAUSE BIRTH DEFECTS. WOMEN OF CHILD BEARING AGE SHOULD AVOID EXPOSURE TO LEAD AND ITS INORGANIC COMPOUNDS DUE TO POST-NATAL EFFECTS.
MUTAGENICITY: NO DATA AVAILABLE TO INDICATE PRODUCT OR ANY COMPONENTS PRESENT AT GREATER THAN 0.1% IS MUTAGENIC OR GENOTOXIC.

4. FIRST AID MEASURES

SKIN EXPOSURE: WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDRY. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.
EYE EXPOSURE: FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 20 MINUTES RETRACTING EYELIDS OFTEN. TILT THE HEAD TO PREVENT CHEMICAL FROM TRANSFERRING TO THE UNCONTAMINATED EYE. GET IMMEDIATE MEDICAL ATTENTION.
INHALATION: REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, HAVE A TRAINED INDIVIDUAL ADMINISTER OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION AND HAVE A TRAINED INDIVIDUAL ADMINISTER OXYGEN. GET MEDICAL ATTENTION IMMEDIATELY
INGESTION: SEEK MEDICAL ATTENTION IMMEDIATELY.
NOTES TO DOCTOR: NO ADDITIONAL FIRST AID INFORMATION AVAILABLE

5. FIRE FIGHTING MEASURES

FLAMMABILITY SUMMARY: NOT COMBUSTIBLE
FLASH POINT: N/A
AUTOIGNITION TEMPERATURE: N/E
EXPLOSIVE LIMITS % IN AIR: N/E

DUSTS AT SUFFICIENT CONCENTRATIONS CAN FORM EXPLOSIVE MIXTURES WITH AIR.
FIRE FIGHTING METHODS: WILL NOT BURN, NO SPECIAL INSTRUCTIONS AVAILABLE. USE METHODS APPROPRIATE FOR SURROUNDING MATERIALS.
HAZARDOUS COMBUSTION PRODUCTS: METAL FUMES; TOXIC FUMES.

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS AND EQUIPMENT: EXPOSURE TO THE SPILLED MATERIAL MAY BE IRRITATING OR HARMFUL. FOLLOW PERSONAL PROTECTIVE EQUIPMENT RECOMMENDATIONS FOUND IN SECTION VIII OF THIS MSDS.

Page 3 of 5
Revised 7/25/02
Replaces (None)
Printed 7/25/02
MSDS ID: HI FLO

MATERIAL SAFETY DATA SHEET

6. ACCIDENTAL RELEASE MEASURES (Cont.)

METHODS FOR CLEAN-UP: WEAR COMPLETE AND PROPER PERSONAL PROTECTIVE EQUIPMENT FOLLOWING THE RECOMMENDATION OF SECTION VIII GATHER AND STORE IN A SEALED CONTAINER PENDING A WASTE DISPOSAL EVALUATION. DO NOT USE BROOM OR AIR CLEANING ETC.

7. HANDLING AND STORAGE

HANDLING MEASURES: HARMFUL OR IRRITATING MATERIAL. AVOID CONTACTING AND AVOID BREATHING THE MATERIAL. USE ONLY IN A WELL VENTILATED AREA.
AS WITH ALL CHEMICALS, GOOD INDUSTRIAL HYGIENE PRACTICES SHOULD BE FOLLOWED WHEN HANDLING THIS MATERIAL. AVOID CONTACT WITH MATERIAL, AVOID BREATHING DUSTS OR FUMES, USE ONLY IN A WELL VENTILATED AREA. WASH THOROUGHLY AFTER HANDLING; WASH HANDS BEFORE EATING; DO NOT GET IN EYES, ON SKIN AND CLOTHING; MINIMIZE DUST GENERATION AND ACCUMULATION; REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.

STORAGE MEASURES: NO SPECIAL REQUIREMENTS

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING MEASURES: USE LOCAL EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO MINIMIZE EXPOSURES AND MAINTAIN OPERATOR COMFORT.
ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO CONTROL AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS.

RESPIRATORY PROTECTION: RESPIRATORY PROTECTION MAY BE REQUIRED TO AVOID OVEREXPOSURE WHEN HANDLING THIS PRODUCT. GENERAL OR LOCAL EXHAUST VENTILATION IS THE PREFERRED MEANS OF PROTECTION. USE A RESPIRATOR IF GENERAL ROOM VENTILATION IS NOT AVAILABLE OR SUFFICIENT TO ELIMINATE SYMPTOMS.
FOLLOW A RESPIRATORY PROTECTION PROGRAM THAT MEETS 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS WHENEVER WORK PLACE CONDITIONS WARRANT THE USE OF A RESPIRATOR. WEAR A NIOSH APPROVED RESPIRATOR IF ANY EXPOSURE IS POSSIBLE.

EYE PROTECTION: WEAR CHEMICALLY RESISTANT SAFETY GLASSES WITH SIDE SHIELDS WHEN HANDLING THIS PRODUCT. DO NOT WEAR CONTACT LENSES.

SKIN PROTECTION: WEAR GOGGLES AND A FACE SHIELD
WEAR PROTECTIVE GLOVES. CLEAN PROTECTIVE EQUIPMENT



MATERIAL SAFETY DATA SHEET

Page 4 of 5
Revised 7/25/02
Replaces (None)
Printed 7/25/02
MSDS ID: HI FLO

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION (Cont.)

REGULARLY. WASH HANDS AND OTHER EXPOSED AREAS WITH MILD SOAP AND WATER BEFORE EATING, DRINKING, AND WHEN LEAVING WORK.

CONTROL PARAMETERS:	-----ACGIH EXPOSURE LIMITS-----		
CHEMICAL NAME	TLV-TWA	STEL	CEILING
LEAD	0.05 mg/m3 TWA		
TIN	2 mg/m3 TWA		

9. PHYSICAL AND CHEMICAL PROPERTIES

COLOR: GREY
ODOR: NONE
pH: N/A
VAPOR PRESSURE, mm Hg at 20C:

10. STABILITY AND REACTIVITY

DECOMPOSITION PRODUCTS: METAL FUMES; TOXIC FUMES.
INCOMPATIBLE MATERIALS: PEROXIDES; METALS; STRONG ACIDS; STRONG OXIDIZING AGENTS; STRONG REDUCING AGENTS; ACIDS; CHLORINE; MOISTURE; STRONG ALKALIES
CONDITIONS TO AVOID: NONE KNOWN
CONTAMINATION; CONTACT WITH AIR. CONTACT WITH WATER

11. TOXICOLOGICAL INFORMATION

COMPONENT TOXICOLOGY DATA (NIOSH)
CHEMICAL NAME LD50/LC50

12. ECOLOGICAL INFORMATION

OVERVIEW: SLIGHT ECOLOGICAL HAZARD. IN HIGH CONCENTRATIONS, THIS PRODUCT MAY BE DANGEROUS TO PLANTS AND/OR WILDLIFE.

Page 5 of 5
Revised 7/25/02
Replaces (None)
Printed 7/25/02
MSDS ID: HI FLO

MATERIAL SAFETY DATA SHEET

13. DISPOSAL CONSIDERATIONS

WASTE DESCRIPTION: SPENT OR DISCARDED MATERIAL IS PROBABLY A HAZARDOUS WASTE.
DISPOSAL METHODS: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, LOCAL, OR
PROVINCIAL LAWS AND REGULATIONS.

14. TRANSPORT INFORMATION

SHIPPING BASIC DESCRIPTION: DOT & IATA: NOT RESTRICTED

15. REGULATORY INFORMATION

TSCA STATUS: ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY
OF EXISTING CHEMICAL SUBSTANCES.

REGULATED CHEMICALS:

4

CHEMICAL NAME		REGULATION
LEAD	7439-92-1	SARA 313
LEAD	7439-92-1	CA PROP 65

16. OTHER INFORMATION

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Additionally, Alpha Metals, Inc. assumes no responsibility for injury to the vendee or third persons proximately caused by the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.