

ALPHAMETALS INC. -- SOLDER OF ALLOYS OF LEAD,TIN,SILVER,BISMUTH -- 3439-00-015-5327  
===== Product Identification =====

Product ID:SOLDER OF ALLOYS OF LEAD,TIN,SILVER,BISMUTH

MSDS Date:08/13/1987

FSC:3439

NIIN:00-015-5327

MSDS Number: BRNGN

=== Responsible Party ===

Company Name:ALPHAMETALS INC.

Address:600 RT 440

City:JERSEY CITY

State:NJ

ZIP:07304-1027

Country:US

Info Phone Num:201-434-6778

Emerg

ency Phone Num:201-434-6778

CAGE:96913

=== Contractor Identification ===

Company Name:DEANCO INC

Address:7933 QUEENAIR DR

Box:City:GAITHERSBURG

State:MD

ZIP:20879-4137

Country:US

Phone:301-948-5444

CAGE:9K946

Company Name:KINDEL R E AND CO

Address:326 E 3RD

Box:City:CINCINNATI

State:OH

ZIP:45202-3510

Country:US

CAGE:96913

===== Composition/Information on Ingredients =====

Ingred Name:LEAD (SARA III)

CAS:7439-92-1

RTECS #:OF7525000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0

.05 MG/M3;1910.1025  
ACGIH TLV:0.15 MG/M3;DUST 9293  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:TIN  
CAS:7440-31-5  
RTECS #:XP7320000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:2 MG/M3  
ACGIH TLV:2 MG/M3; 9293

Ingred Name:SILVER (SARA III)  
CAS:7440-22-4  
RTECS #:VW3500000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.01 MG/M3  
ACGIH TLV:0.1 MG/M3; 9293  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:BISMUTH  
CAS:7440-69-9  
RTECS #:EB2600000  
Other REC Limits:NONE RECOMMENDED

Ingred Name:ANTIMONY (SARA III)  
CAS:7440-36-0  
RTECS #:CC4025000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.5 MG/M3  
ACGIH TLV:0.5 MG SB/M3; 9293  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:INDIUM  
CAS:7440-74-6  
RTECS #:NL1050000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1 MG/M3  
ACGIH TLV:0.1 MG/M3; 9293

===== Hazards Identification =====

LD50 LC50 Mixture:TLV LEAD=0.05 MG/M3  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC

:YES OSHA:NO

Health Hazards Acute and Chronic:MOLTEN SOLDER DOES NOT PRODUCE SIGNIFICANT QUANTITIES OF FUME BELOW 900F.TIN:DUST/FUMES MAY IRRITATE SKIN AND MUCOUS MEMBRANES,POSSIBLE LUNG DAMAGE.SILVER:MAY DISCOLOR SKIN,EYES.BISMUTH:GUM DISCOLORATION/INFLAMATION.ANTIMONY:GI UPSET,INDIUM:MAY CAUSE BLOOD DAMAGE,LIVER AND KIDNEY DAMAGE.LEAD:LIVE AND CNS DAMAGE.

Explanation of Carcinogenicity:LEAD COMPOUNDS ARE CONSIDERED TO BE A CANCER RISK BY IARC.

Effects of Overexposure:

ANTIMONY:SLEEPLESSNESS,IRITABILITY,MUSCLE PAIN.INDIUM:WEIGHT LOSS.BISMUTH:BAD BREATH.SILVER:DISCOLORATION OF EYES AND SKIN.TIN:IRRITATION.LEAD:ANEMIA,INSOMNIA,WEAKNESS,CONSTIPATION,NAUSEA,ABDONIMAL PA IN.

Medical Cond Aggravated by Exposure:WOMEN OF CHILD BEARING AGE SHOULD AVOID CONTACT WITH LEAD.

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===== First Aid Measures =====

First Aid:INHAL:REMOVE FROM EXPOSURE.CALL PHYSICIAN.INGEST:CALL PHYSICIAN OR POISON CONTROL CENTER.SKIN: HOT MEATL BURNS SHOULD BE COOLED WITH WATER;CALL PHYSICIAN.EYES:FLUSH WITH WATER;CAONTACT PHYSICIAN.

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===== Fire Fighting Measures =====

Flash Point:NONE

Extinguishing Media:USE MEDIA APPROPRAITE FOR SURROUNDING FIRE.

Fire Fighting Procedures:USE A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:THIS PRODUCT IN DUST FORM IS AN EXPLOSION HAZARD.LEAD FUMES ARE TOXIC.

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===== Accidental Release Measures =====

Spill Release Procedures:AVOID INHALING FUMES OR DUST.VACUUMING IS RECOMMENDED.PLACE IN AN APPROPRIATE CONTAINER FOR DISPOSAL.

Neutralizing Agent:NONE

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===== Handling and Storage =====

Handling and Storage Precautions:DO NOT USE OR CONSUME FOOD,DRINK,TOBACCO OR COSMETICS IN WORK AREA.

Other Precautions:EMPTY PRODUCT CONTAINERS RETAIN RESIDUE AND MUST BE LABELED"FOR INDUSTRIAL USE ONLY.KEEP OUT OF REACH OF CHILDRE

N.DO  
NOT TAKE INTERNALLY".

===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE A NIOSH APPROVED DUST/FUME RESPIRATOR WHEN TLV IS EXCEEDED.

Ventilation:USE MECHANICAL(GENERAL) OR LOCAL EXHAUST.

Protective Gloves:TO AVOID BURNS.

Eye Protection:SAFETY OR WELDING GLASSES/HOOD.

Other Protective Equipment:WORK CLOTHES SHOULD BE WORN.

Work Hygienic Practices:WASH HANDS.SEPERATE WORK CLOTHES FROM STREET CLOTHES.LAUNDER WORK CLOTHES BEFORE REUSE.KE EP FOOD OUT OF THE WORK AREA.

Supplemental Safety and Health  
NONE

===== Physical/Chemical Properties =====

HCC:N1

NRC/State Lic Num:NONE

Solubility in Water:INSOLUBLE

Appearance and Odor:METAL;SILVER-GRAY;ODORLESS

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES  
OXIDIZING MATERIELS,ACIDS,HYDROGEN PEROXIDE.

Stability Condition to Avoid:NONE

Hazardous Decomposition Products:LEAD FUMES AND LEAD PARTICU LATES.

===== Disposal Considerations =====

Waste Disposal Methods:RECYLCLE OR DISPOSE OF IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL REGULATIONS.

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