

Kirk Site

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Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072



IDENTITY (As Used on Label and List)

Note: Blank spaces are not permitted. If any item is not applicable, or no
information is available, the space must be marked to indicate that.

Section I ZINC ALLOYS

Manufacturer's Name

ALLIED METAL CO.

Emergency Telephone Number

312/225-2800

Address (Number, Street, City, State, and ZIP Code)

2059 S. CANAL ST.

Telephone Number for Information

312/225-2800

CHICAGO, IL. 60616

Date Prepared

9/2/97

Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (option)
ZINC 7440-66-6	5MG/M ³	10MG/M ³		REMAINDER
COPPER 7440-50-8	0.1MG/M ³	2MG/M ³		3.5% MAX
MAG 1309-48-4	15MG/M ³	10MG/M ³		25% MAX
ALUM 7429-90-5	15MG/M ³	10MG/M ³		28% MAX
IRON 1309-37-1	10MG/M ³	5MG/M ³		20% MAX
TIN 7440-31-5	2MG/M ³	2MG/M ³		0.1% MAX
LEAD 7439-92-1	0.05MG/M ³	0.15MG/M ³		0.02% MAX
CADMIUM 7440-43-9	0.05MG/M ³			0.015% MA

Section III — Physical/Chemical Characteristics

Boiling Point	APPROX. 1663	Specific Gravity (H ₂ O = 1)	RANGE 5.0 - 7
Vapor Pressure (mm Hg.)	N/A	Melting Point	APPROX. 780
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/Z

Solubility in Water

NONE

Appearance and Odor

SOLID - BLUISH-WHITE-NO ODOR

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	LEL	UEL
		N/A	N/A	N/A

Extinguishing Media

USE DRY CHEMICAL OR CARBON DIOXIDE EXTINGUISHING MEDIA

Special Fire Fighting Procedures

ZINC DUST IS FLAMMABLE, WHEN SUSPENDED IN AIR AT CONCENTRATION EXCEEDING 400 G/M³

SELF-CONTAINED, BREATHING APPARATUS SHOULD BE USED WHEN FIGHTING A FIRE

Unusual Fire and Explosion Hazards

ZINC DUST IN CONTACT WITH WATER OR ACIDS EVOLVES HYDROGEN. ZINC OXIDE FUME MAY REACT

VIOLENTLY WITH CHLORINATED RUBBER. WET METALLIC ZINC WHEN CHARGED INTO MOLTEN METAL

(Reproduce locally) IS AN EXPLOSIVE HAZARD.

OSHA 174, Sept. 91

KIRKSITE

Section V -- Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	UNDER NORMAL CONDITION OR TRANSPORTATION, STORAGE AND USE.
Incompatibility (Materials to Avoid) ZINC DUST IN CONTACT WITH ACIDS EVOLVE HYDROGEN GAS. ZINC OXIDE MAY REACT VIOLENTLY WITH CHLORINATED RUBBER			
Hazardous Decomposition or Byproducts			

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI -- Health Hazard Data

Route(s) of Entry:	Inhalation? YES	Skin? YES	Ingestion? NOT NORMALLY
Health Hazards (Acute and Chronic) INHALATION OF ZINC DUST OR ZINC OXIDE FUMES CAN CAUSE METAL FUME FEVER. SKIN AND EYE CONTACT TO DUST OR FUMES CONTAINING ZINC CAN CAUSE SKIN AND EYE IRRITATION.			
Cardiogenicity:	NTP?	IARC Monographs? NO	OSHA Regulated? NO

Signs and Symptoms of Exposure
METAL FUME FEVER SYMPTOMS INCLUDE HEADACHE, FEVER, CHILLS, MUSCLE WEAKNESS, VOMITING, NAUSEA, SYMPTOMS USUALLY START SEVERAL HOURS AFTER EXPOSURE.

Medical Conditions
Generally Aggravated by Exposure PRE-EXISTING UPPER RESPIRATORY AND LUNG DISEASE.

Emergency and First Aid Procedures
METAL FUME FEVER: REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, GIVE OXYGEN AND CALL A PHYSICIAN.

Section VII -- Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
IF METAL IS IN A SOLID FORM, COLLECT FOR REMELTING OR IF METAL IS IN A MOLTEN STATE, ALLOW TO COOL THEN COLLECT FOR REMELTING.

Waste Disposal Method
NOT A WASTE. COLLECT FOR RECYCLING - NOT FEDERALLY REGULATED.

Precautions to Be Taken in Handling and Storing
IF ZINC IS IN A MOLTEN STATE, AVOID CONTACT WITH WATER OR MOISTURE. IF IT IS IN A SOLID STATE, BE CAREFUL OF SHARP EDGES. STORE IN A DRY AREA. DO NOT ALLOW TO GET WET

Other Precautions
USE SAFE FOUNDRY PRACTICES.

Section VIII -- Control Measures

Respiratory Protection (Specify Type) REQUIRED WHEN CUTTING OR WELDING, USE PARTICLE MASK WITH ADEQUATE VENTILATION.			
Ventilation	Local Exhaust	Special	N/A
	ONLY IF TLU'S OR PEL'S ARE EXCEEDED	Other	N/A
	Mechanical (General)		N/A
Protective Gloves YES! TO PREVENT CUTS OR BURNS IF METAL IS HOT. AS NEEDED		Eye Protection SAFETY GLASSES AND/OR FACE SHIELDS	
Other Protective Clothing or Equipment WHEN HANDLING MOLTEN ZINC, FIRE RETARDANT CLOTHING, FACE SHIELDS, HARD HAT PROTECTIVE & SPATS ARE RECOMMENDED			
Work/Hygienic Practices GOOD NORMAL HYGIENIC PRACTICES ARE TO BE FOLLOWED.			

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