ZC-M002

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ZINC CORPORATION OF AMERICA

MSDS for ZINC METAL, CONTINUOUS GALVANIZING GRADE

1 - Site Specific Information 

NO Site Specific Information on file for this Chemical

2 - Section I (General Information)

NAME: ZINC METAL

MANUFACTURER: ZINC CORPORATION OF AMERICA

EMERGENCY: 412-774-1020 CHEMTREC: 800-424-9300

300 FRANKFORT ROAD

MONACA, PA 15061

PO BOX 579

BARTLESVILLE, OK 74005

412-774-1020

918-336-7100

TRADE NAME AND SYNONYMS: CONTINUOUS GALVANIZING GRADE

CHEMICAL FAMILY: HEAVY METAL

CAS NO. 7440-66-6

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FORMULA: Zn

DOT HAZARD CLASS: NIF UN NO. NIF NA NO. NIF

ISSUE DATE: 2/25/88

REVISION DATE: 03/14/89

### DISCLAIMER:

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## 3 - Section II - Hazardous Ingredients

MATERIAL	ક	PEL	TLV	CAS NO.
ZINC	98.6	NIF	NIF	7440-66-6
LEAD	.30max	.05mg/M3	.15mg/M3	7439-92-1
ALUMINUM	.60max	15mg/M3*	10mg/M3	7429-90-5

<sup>\* (5</sup>mg/M3 Respirable)

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4 - Section III - Physical Data

BOILING POINT (760 MM HG): 1665 F MELTING POINT: 788 F

SPECIFIC GRAVITY: 7.12 EVAPORATION RATE ( =1): N/A

VAPOR DENSITY (AIR = 1): N/A SOLUBILITY IN WATER: NEGLIGIBLE

PERCENT VOLATILE BY VOLUME (%): N/A VAPOR PRESSURE AT 909 F: 0.13kPa

APPEARANCE AND ODOR: SILVER-WHITE, BLUISH-WHITE METAL

5 - Section IV - Fire and Explosion Hazard Data

FLASH POINT (METHOD USED): N/A . NFPA FIRE RATING

FLAMMABLE LIMITS:

LEL: N/A

UEL: N/A

HEALTH -0

FLAMMABILITY -0

REACTIVITY -0

EXTINGUISHING MEDIA: DRY CHEMICAL, DRY POWDER, OR CARBON DIOXIDE EXTINGUISHER.

DO NOT USE WATER.

SPECIAL FIRE FIGHTING PROCEDURES: USE NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: HEATING OF METAL BEYOND BOILING POINT RESULTS IN EVOLUTION OF ZINC VAPOR, WHICH IMMEDIATELY REACTS WITH AIR TO FORM ZINC OXIDE FUME. SLABS MUST BE COMPLETELY DRY BEFORE CHARGING INTO MOLTEN METAL TO PREVENT A STEAM EXPLOSION.

### 6 - Section V - Health Hazard Data

THRESHOLD LIMIT VALUE: 10mg/M3 (NUISANCE DUST)

PERMISSIBLE EXPOSURE LIMIT: 15 mg/M3 (NUISANCE DUST)

ROUTES OF ENTRY: INHALATION OF ZINC FUME IF MATERIAL HAS BEEN HEATED ABOVE THE BOILING POINT.

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6 - Section V - Health Hazard Data (continued)

EFFECTS OF OVEREXPOSURE: PROLONGED INHALATION OF HIGH LEVELS OF ZINC VAPOR MAY RESULT IN TIGHTNESS OF CHEST, METALLIC TASTE, COUGH, DIZZINESS, FEVER, CHILLS HEADACHE, NAUSEA, AND DRY THROAT. OVEREXPOSURE TO ZINC VAPOR MAY PRODUCE SYMPTOMS KNOWN AS METAL FUME FEVER OR "ZINC SHAKES", AN ACUTE, SELF-LIMITING CONDITION WITHOUT RECOGNIZED COMPLICATIONS.

OVEREXPOSURE TO HIGH LEVELS OF AIRBORNE OR INGESTED LEAD CAN RESULT IN NAUSEA, WEAKNESS, PAIN IN JOINTS, AND IRRITABILITY. CHRONIC EXPOSURE TO LEAD CAN RESULT IN LEAD POISONING.

PROLONGED BREATHING OF HIGH QUANTITIES OF ALUMINUM DUST CAN RESULT IN A BENIGN CONDITION KNOWN AS "SHAVER'S CONDITION".

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: ZINC VAPOR MAY BE AN IRRITANT TO PRE-EXISTING RESPIRATORY CONDITIONS.

DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS, KIDNEYS, NERVOUS, AND POSSIBLY REPRODUCTIVE SYSTEMS MAY BE AGGRAVATED BY OVEREXPOSURE TO LEAD. EXPOSURE TO LEAD MAY RESULT IN INJURY TO A DEVELOPING FETUS.

EMERGENCY AND FIRST AID PROCEDURES: SYMPTOMS RESULTING FROM INHALATION OVEREXPOSURE USUALLY DISAPPEAR WITHIN 24 HOURS. SYMPTOMATIC TREATMENT, SUCH AS BED REST, POSSIBLY ASPIRIN, TO AFFORD RELIEF FROM FEVER AND CHILLS. IN ALL CASES, CONSULT PHYSICIAN FOR MEDICAL ATTENTION.

#### CARCINOGENIC ASSESSMENT:

NTP? NO

IRAC MONOGRAPH? NO

OSHA? NO

## 7 - Section VI - Reactivity Data

STABILITY: ( )UNSTABLE

(X) STABLE

CONDITIONS TO AVOID: NONE

INCOMPATIBILITY (MATERIALS TO AVOID): AVOID CONTACT WITH ACIDS AND ALKALIS.

HAZARDOUS DECOMPOSITION PRODUCTS: ZINC AND LEAD BOIL OFF AS METAL FUMES AT ELEVATED TEMPERATURES.

HAZARDOUS POLYMERIZATION:

( ) MAY OCCUR

(X) WILL NOT OCCUR

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# 8 - Section VII - Spill or Leak Procedures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: MATERIAL SHOULD BE CONTAINED FOR RECYCLING.

#### WASTE DISPOSAL METHOD:

MATERIAL MAY BE RECYCLED OR DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS. THIS MATERIAL MAY BE REGULATED UNDER CERCLA, TSCA, SARA, AND/OR RCRA REGULATIONS.

# 9 - Section VIII - Special Protection Information

RESPIRATORY PROTECTION (SPECIFY TYPE): USE NIOSH/MSHA APPROVED TYPE RESPIRATOR FOR PROTECTION AGAINST ZINC FUME.

VENTILATION: LOCAL EXHAUST OR OTHER VENTILATION THAT WILL REDUCE DUST CONCENTRATIONS TO LESS THAN PERMISSIBLE EXPOSURE LIMITS.

PROTECTIVE GLOVES: RECOMMENDED TO PREVENT SKIN IRRITATION IN HYPERSENSITIVE INDIVIDUALS.

EYE PROTECTION: USE SAFETY EYEWEAR FOR PROTECTION AGAINST AIRBORNE PARTICULATE MATTER.

OTHER PROTECTIVE EQUIPMENT: TO PREVENT BURNS FROM CONTACT WITH MOLTEN METAL, APPROPRIATE PROTECTIVE GARMENTS SHOULD BE WORN. SUCH GARMENTS MAY INCLUDE APRONS, FACE SHIELDS, LEGGINGS, ETC., DEPENDING ON CONDITIONS OF USE.

### 10 - Section IX - Special Precautions

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: STORE IN A DRY LOCATION, SEPARATE FRON ACIDS AND ALKALIS. KEEP SLABS OF METAL DRY SO THEY DO NOT CONTAIN ANY MOISTURE WHEN READY FOR USE.

OTHER PRECAUTIONS: DAMP SLABS PLACED IN MOLTEN METAL MAY RESULT IN A STEAM EXPLOSION.