



ZINC CORPORATION OF AMERICA 300 FRANKFORT ROAD MONACA, PA 15061-2295

(412) 774-1020

MSDS FOR ZINC METAL: SPECIAL HIGH GRADE, HIGH GRADE

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

P.O. Box 579

Bartlesville, OK 74005

412-774-1020

918-336-7100

TRADE NAME AND SYNONYMS: Special high grade or high grade zinc

CHEMICAL FAMILY: Nonferrous Heavy Metal

CAS NO.:

7440-66-6

FORMULA: Zn

DOT HAZARD CLASS: Not listed

UN NO.: NAIF*

NA NO.: NAIF*

ISSUE DATE: 2/25/88

REVISION DATE: 1/03/90

SECTION II - INGREDIENTS

MATERIAL

CAS NO

%

ZINC

7440-66-6

99.9

^{*} NAIF - No applicable information found.

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SECTION III PHYSICAL DATA

BOILING POINT (760 MM HG): 16650 F

MELTING POINT: 7880 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, or Bluish-white metal

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Zinc does not introduce a serious fire hazard in sheets, castings, or other massive forms because of the difficulty of Ignition, although once Ignited (above 1665°F), large pieces burn vigorously.

FLASH POINT (METHOD USED): N/A

NFPA FIRE RATING

FLAMMABLE LIMITS: LEL: N/A

HEALTH

0

UEL: N/A

FLAMMABILITY

0.

REACTIVITY

0

EXTINGUISHING MEDIA: Smother and cool with a suitable dry extinguishing agent (class D fires) such as dry powder (Ansul Met-L-X), zinc oxide or dry sand. Water should not be used, however wherever it is necessary to cool exposures, extreme caution should be taken to prevent contact with molten zinc or burning zinc products.

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 vapors, 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.

SECTION V - HEALTH HAZARD DATA

MATERIAL	FORM	OSHA - PEL		ACGIH - TLV	
		AWT mg/M3	STEL mg/M3	TWA mg/M3	STEL mg/M3
ZINC	Dust				
	Oxide Fume	5	10	5	_

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ROUTES OF ENTRY

PRIMARY: Inhalation, if material has been heated above the boiling point, driving off zinc fume.

SECONDARY: Ingestion of dusts.

EFFECTS OF SHORT TERM OVEREXPOSURE:

ZINC: Inhalation of high levels of zinc vapor (zinc oxide fumes) may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever, muscular pain, nausea and vomiting.

EMERGENCY AND FIRST AID PROCEDURES: Symptoms resulting from inhalation overexposure usually disappear within 24 hours. Symptomatic treatment, such as bed rest and possibly aspirin is recommended to provide relief from fever and chills. In all cases, consult physician for medical attention.

EFFECTS OF LONG TERM EXPOSURE:

ZINC: Chronic exposure to zinc may cause respiratory tract irritation with nasopharyngitis and laryngitis. However, zinc is an essential substance for humans. The recommended daily dietary allowance (RDA) for zinc is 15mg per day.

CARCINOGENIC ASSESSMENT:

NTP? No

TRAC MONOGRAPH? No

OSHA? No

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 boils off as vapor at elevated temperatures.

HAZARDOUS POLYMERIZATION:

() May occur

(X) Will not occur

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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.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): Use NIOSH/MSHA approved type respirator for protection against dust and metal 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 eyeware for protection against airborne particulate matter.

OTHER PROTECTIVE EQUIPMENT: To prevent burns from contact with molten metal, appropriate protective garments shrking in areas where this material exists.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a dry locatin, separate from acids and alkalis. Keep metal dry so it does not contain any moisture when ready for use.

OTHER PRECAUTIONS: Damp slabs placed in molten metal may result in a steam explosion. Always practice good personal hygiene when working in areas where this material exists.

<u>DISCLAIMER</u>: As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

Noranda Inc.

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February 16, 2000

Richard Craven South Atlantic, LLC P.O. Box 4420 Pinehurst, North Carolina United States 28374

Dear Mr. Craven:

RE: SARA SUPPLIER NOTIFICATION ZINC METAL (SLABS, JUMBOS, SHOT) Canadian Electrolytic Zinc

The purpose of this letter is to inform you that the product or component(s) of the product we sell to you is subject to the reporting requirements of Section 313, Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), 40 CFR Part 372. Particulars of the product or component(s) of the product are as follows:

CAS NUMBER AND CHEMICAL 7440-66-6 ZINC

%BY WEIGHT 100

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 40 CFR Part 302 also requires certain manufactures to report on annual emissions of specific toxic chemical categories.

If you are unsure as to your reporting requirements, or need more information call the SARA Hotline: (800) 424-9346, or the Emergency Planning and Community Right-to-Know Act Hotline: (800) 535-0202 (in Washington, D.C.) or (202) 479-2449 (in Alaska).

This notification should be attached to the Material Safety Data Sheet for the product and any duplication or redistribution of the Material Safety Data Sheet must include this attachment.

If you repackage or otherwise redistribute this product to industrial customers, a notice similar to this one must be sent to those customers.

Yours very truly,

G. Reid Bowlby

VP, Zinc Metal Sales

MSDS File -