

M a t e r i a l S a f e t y D a t a S h e e t

A. B. Chance Company
210 N. Allen Street
Centralia, Missouri 65240

Product: GALVANIZED STEEL PRODUCTS

MSDS No: ABC / C69
Revision: A
Date: May 10, 1996

National Paint and Coatings Association

Hazardous Material Identification System

HEALTH HAZARD	0 - Minimal
FLAMMABILITY HAZARD	1 - Slight
REACTIVITY HAZARD	1 - Slight
PERSONAL PROTECTION	SEE SECTION 8

SECTION I. MATERIAL IDENTIFICATION

Trade/Material Name: GALVANIZED STEEL PRODUCTS

Description: GALVANIZED COATED STEEL ANCHORS AND OTHER TYPES OF HARDWARE USED IN POWER DISTRIBUTION INDUSTRY

Other Designations: BRIGHT SILVER METAL LUSTER.

CAS: N/A

Chemical Name: N/A

Manufacturer: A.B. CHANCE CO.
210 N. ALLEN ST
CENTRALIA MO. 65240

Phone: DAYS 573-682-8543
NIGHTS /WEEKENDS 573-682-8727

SECTION II. INGREDIENTS AND HAZARDS

Ingredient Name:	Percent:	Exposure Limits:
ZINC METAL	1-5%	OSHA PEL None established* ACGIH TLV, 1989-90 None established* NIOSH REL, 1987 None established*
STEEL	94-98%	NONE ESTABLISHED
OTHER	LESS THAN 1%	

*THE CURRENT OSHA PEL FOR ZINC OXIDE FUMES WHICH MAY BE RELEASED WHEN PRODUCT IS WELDED IS 5 MG/CUBIC METER. THE OSHA PEL FOR IRON OXIDE WHICH MAY BE RELEASED WHEN PRODUCT IS WELDED IS 10 MG/CUBIC METER.

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SECTION III. PHYSICAL DATA

Appearance & Odor: SILVER METAL LUSTER NO ODOR

Boiling point: 2800 F	Evaporation rate: N/A
Vapor pressure: N/A	Specific gravity (H₂O=1): 7.7
Water solubility (%): VERY LOW	Melting point: 419°F ZINC 2800 F STEEL
Vapor density (air=1): N/A	% volatile by volume: N/A
pH: N/A	Molecular weight: N/A

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point (method): None reported **Limits: LEL %:** NONE **UEL %:** NONE REPORTED

NFPA Fire Hazard Symbol Codes: Flammability: 0 Health: 1 Reactivity: 1 Special: —

Extinguishing Media: PRODUCT WILL NOT BURN HOWEVER ZINC OXIDE FUMES MAY BE RELEASED IF EPOSED TO FLAMES. **Autoignition Temp:** **

Unusual fire or explosion hazards: NONE

Special fire-fighting procedures: IF THIS PRODUCT IS EXPOSED TO FIRE. FIRE FIGHTERS SHOULD USE SELF CONTAINED BREATHING APPARATUS. AND PROTECTIVE CLOTHING.

SECTION V. REACTIVITY DATA

Hazardous polymerization NONE KNOWN occur

Hazardous decomposition Products: Thermal oxidative decomposition of zinc can produce highly toxic fumes. Above 999°F (537°C) vaporized zinc burns in air with a blue-green flame to produce zinc oxide fumes.

SECTION VI. HEALTH HAZARD INFORMATION

Summary of risks: Zinc is relatively nontoxic, but when combined with other materials such as oxygen or mineral acids, the resulting compounds can have toxic effects. It is not readily absorbed through the skin, gastrointestinal (GI tract), or lungs. Although most inorganic zinc compounds are potential causes of gastroenteric irritation, a high-level dose is relatively nontoxic when ingested. Zinc is considered essential to life. Ingestion of soluble salts may cause nausea and vomiting, sluggishness, and light-headedness. Inhalation of zinc fumes normally

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HEALTH HAZARD INFORMATION continued from page 2

generated by zinc and extreme heat may cause metal fume fever, which is accompanied by throat dryness and irritation, coughing, weakness, dyspnea, and generalized aching that generally passes within 24 hr. These symptoms usually begin 3 to 10 hr after exposure and resolve within 24 to 48 hr. Inhalation of zinc dust may cause mild irritation to the upper respiratory tract. Prolonged skin contact with zinc may cause a mild, drying dermatitis.

Acute effects: Metal fume fever is an acute, self-limiting condition, without recognized complications, aftereffects, or chronic forms. Symptoms appear several hours after exposure. Removal from exposure normally alleviates symptoms with no residual or chronic effects. A degree of tolerance may result from continued exposure, but is quickly lost after a day or two of nonexposure.

Chronic effect(s): Zinc has little history of causing chronic health effects.

First aid:

Inhalation: ZINC OXIDE AND IRON OXIDE FUMES MAY CAUSE DIZZINESS AND BREATHING DIFFICULTIES IF SO REMOVE TO FRESH AIR AND CALL DOCTOR.

Ingestion: Physician's Note: Calcium disodium edetate (CaNa₂-EDTA) has been used medically to increase the rate of zinc removal from the body; however, this usually results from chronic fume exposure.

Carcinogenicity: Neither the NTP, IARC, nor OSHA lists zinc as a carcinogen.

After first aid, get appropriate in-plant, paramedic, or community medical attention and support.

SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES

Spill / Leak procedures: ZINC IS REGULATED UNDER CLEAN WATER ACT IF PRODUCT IS EXPOSED TO ELEMENTS CARE SHOULD BE TAKEN TO ENSURE STORMWATER COMPLIES WITH USEPA, STATE, AND LOCAL REGULATIONS

Waste management / Disposal: Follow applicable Federal, state, and local regulations.

OSHA Designations

Air Contaminant (29 CFR 1910.1000 Subpart Z): Not listed

EPA Designations

RCRA Hazardous Waste (40 CFR 261.33): Not listed

Listed as a CERCLA Hazardous Substance* (40 CFR 302.4): Reportable Quantity (RQ): 1000 lb (454 kg) [454 kg] [* per Clean Water Act, Sec. 307(a)]

SARA Extremely Hazardous Substance (40 CFR 355): Not listed

Zinc (fume or dust) is listed as SARA Toxic Chemical (40 CFR 372.65)

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SECTION VIII. SPECIAL PROTECTION INFORMATION

Personal protective equipment:

Respirator: For zinc oxide fume concentrations up to 50 mg/m³ and 250 mg/m³, use, respectively, a fume (high-efficiency particulate) respirator or an air-supplied or self-contained respirator with a full facepiece. Follow OSHA respirator regulations (29 CFR 1910.134).

Workplace considerations:

Ventilation: Provide general and local ventilation systems to maintain airborne concentrations below established PEL'S (Sec. 2). Local exhaust ventilation is preferred since it prevents contaminant dispersion into the work area by eliminating it at its source (Genium ref. 103). THESE PRECAUTIONS ARE ONLY NEEDED WHEN OSHA CLASSIFIED HOT WORK ON PRODUCT.

SECTION IX. SPECIAL PRECAUTIONS

Data source code(s): 2, 4-11, 24, 31, 39-41, 80, 81, 84, 85, 91, 109

Prepared/revised by: BILL EMERY ENVIRONMENTAL MGR.
573-682-8429

May 10, 1996

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