# SAFETY DATA SHEET

ISSUE DATE: 6/10/2009 REVISED DATE: 02/05/16 Supersedes: Any Previous M.S.D.S. On This Product EMERGENCY PHONE NUMBER: INFOTRAC (800)-535-5053

# I. IDENTIFICATION

# PRODUCT NAME: Elgen Galvanized Steel Products

PRODUCT CLASS: Steel

Elgen Manufacturing Company, INC. 10 Railroad Ave. Closter, NJ 07624

#### **II. HAZARDOUS INGREDIENTS**

			OSHA	ACGIH	
MATERIAL:	CAS	<u>% WEIGHT</u>	<u>PEL (mg/m3)</u>	<u>TLV (mg/m3)</u>	
Iron	7439-89-6	94.00 - 99.66	10 (oxide fume)	5 (oxide fume)	
Zinc	7440-66-6	1.00-4.50	15 (oxide dust)	15 (oxide dust)	
Aluminum	7429-90-5	.004	15 (dust)	10 (dust)	
Antimony	7440-36-0	<.9	0.5	0.5	
Arsenic	7440-38-2	<.09	.01	.01	
Beryllium	7440-41-7	<.09	.002	.002	
Boron	7440-42-8	<.9	15	10	
Cadmium	7440-43-9	<.09	.005	.01	
Calcium	1305-78-8	<.9	5	2	
Carbon	7440-44-0	.04-1.0	15	10	
Chromium*	7440-47-3	0.01-1.5	0.5	0.06	
Cobalt	7440-48-4	<.09	.1	.02	
Manganese	7439-96-5	0.05-2.0	5 (dust)	5 (dust)	
			5 (fume)	1 (fume)	
Phosphorous	8049-19-2	.001020	15	10	
Molybdenum	7439-98-7	0.00010	15	10	
Nickel	7440-02-0	0.0130	1	1	
Silicon	7440-21-3	.015220	15	10	
Sulfur	7704-34-9	.001020	15	10	

This product contains the following ingredient at levels subject to reporting requirements of:

SARA 313 (40CFR372): Manganese, Chromium Nickel

OSHA HAZAR ADOUS COMMUNICATIONS STAN DARD, (29CFR1910.1200): Manganese, Chromium, Nick el, Silicon, A luminum metallic powder

CALIFORNIA PROPOSITION 65: This product contains the following trace amounts of chemicals known to the state of California to be a cancer hazard: Nickel

#### **III. PHYSICAL DATA**

APPEARANCE: Metallic Color BOILING POINT: N/A SPECIFIC GRAVITY: 8 g/cm3 SOLUBILITY IN WATER: Not Soluble SOFTENING POINT OF Zing Coating: 850°F MELTING POINT OF BASE METAL: 2750°F

#### **IV. HEALTH HAZARD DATA**

**ROUTE OF EXPOSURE:** Inhalation, skin, eye, ingestion. **EFFECTS OF OVEREXPOSURE:** 

Effects: Chronic inhalation concentrations of iron oxide fumes or dusts may lead to a benign pneumoconiosis (siderosis). Inhalation of high concentrations of ferric oxide may possibly enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. Chronic inhalation concentrations of aluminum fumes or dusts may lead to a fibrotic lung condition known as Shaver's Disease; however, evidence for this is not conclusive since affected workers were exposed to other substances (silica) as well. The inhalation of high concentrations of dust from manganese, copper, lead and/or zinc in the respirable particle size range can cause an influenzalike illness termed metal fume fever. Typical symptoms last 12 to 48 hours and are characterized by metallic taste in mouth, dryness and irritation of the throat, followed by weakness, muscle pain, fever, and chills. Continuous exposures to high concentrations of manganese can cause central nervous system disorders and manganese pneumonia. Fibrosis of lung tissue from manganese exposure has also been reported for products containing manganese only. Overexposure to aluminum dust can cause shortness of breath. Long term inhalation exposure to high concentrations (overexposure) to pneumoconiotic agents may act synergistically with inhalation of oxides, fumes or dusts of this product to cause toxic effects. Prolonged or repeated contact with unprotected skin may result in skin irritation. Torching or burning operations on steel products with oil or organic coating may produce emissions which can be irritating to the eyes and respiratory tract.

#### **V. EMERGENCY AND FIRST AID PROCEDURES**

INHALATION: Remove to fresh air; if condition continues, consult a physician.

**SKIN CONTACT:** Remove particles by washing thoroughly with soap and water. Seek medical attention if condition persists. **EYE CONTACT:** Flush thoroughly with running water to remover particulate, obtain medical attention. **INGESTION:** If significant amounts of metal are ingested, consult physician. If condition is voluntary, psychotherapy is advised.

# VI. FIRE AND EXPLOSION HAZARD DATA

#### FLAMMABILITY CLASS:

FLASH POINT: N/A
EXTINGUISHING MEDIA: Media Suitable For Surrounding Fire (Fp N).
FIRE FIGHTING PROCEDURES: Wear full protective clothing including h elmet, self-contained positive pre ssure-demand breathing apparatus, protective clothing, and a face mask.
SPECIAL PROCEDURES: Use Niosh Approved Scba Full Protective Equipment.

# VII. SPILL OR LEAK PROCEDURES

#### PROCEDURE TO FOLLOW IF MATERIAL IS RELEASE OR SPILLED: N/A

**Waste Disposal Method:** Any excess product can be recycled for futher use, disposed in a permitted hazardous waste landfill, or disposed by other methods which are in accordance with local, state, and federal regulations.

# VIII. SPECIAL PROTECTION

**RESPIRATORY:** NIOSH/MSHA approved dust and fume respirators should be used to avoid excessive inhalation of particulates. **EYE PROTECTION:** Provided when welding, burning, sawing, brazing, grinding or machining to prevent excessive dust or fume exposure.

HAND PROTECTION: Gloves recommended

OTHER: Additional protective equipment and/or clothing may be required

## IX. CARCINOGENIC ASSESSMENT

Minimize and control operations producing airborn dust and fume. Provide adequate local and general exhaust ventilation.

#### X. REACTIVITY DATA

STABILITY: Stable under normal conditions of use, storage and transporation. CONDITIONS TO AVOID: Generation of airborn fume and dust. INCOMPATIBILITY: Strong acids (produce hydrogen gas) HAZARDOUS DECOMPOSITION PRODUCT: Metallic oxide. HAZARDOUS POLYMERIZATION: Will not occur

## **XI. SPECIAL PRECAUTIONS**

HANDLING AND STORAGE: Use good housekeeping practices.

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