MATERIAL 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 Stainless Steel Products**
PRODUCT CLASS: Steel

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

II. HAZARDOUS INGREDIENTS

MATERIAL:	CAS	% WEIGHT	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Iron	7439-89-6	45-90	10 (TWA as fume)	5 (TWA as fume)
Manganese	7440-66-6	0-15	1 (TWA as Fume)	1 (TWA as Fume)
Silicon	7429-90-5	0-3	10 (TWA)	10 (TWA)
Chromium*	7440-36-0	10.5-30	1 (TWA)	.5 (TWA)
Nickel*	7440-38-2	0-40	1 (TWA)	1 (TWA)
Molybdenum	7440-41-7	0-5	5 (TWA as soluble)	5 (TWA as soluble)
Copper	7440-42-8	0-5	.1 (TWA as fume)	.2 (TWA as fume)
Aluminum	7440-43-9	0-1	5 (TWA as fume)	5 (TWA as fume)
Cobalt	1305-78-8	0-1	.05 (TWA)	.05 (TWA)

*Suspect Carcinogen by NTP and IARC

III. PHYSICAL DATA

APPEARANCE: Metallic Color
BOILING POINT: N/A
SPECIFIC GRAVITY: 7.65-7.94 g/cm3
SOLUBILITY IN WATER: Not Soluble
MELTING POINT OF BASE METAL: 2550-2650°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 helmet, self-contained positive pressure-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.