

Heckmann Building Products Inc.
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Melrose Park, IL 60160-2911
800-621-4140
Fax: 708-865-2640

MATERIAL SAFETY DATA SHEETS (MSDS) June 30, 2000.

Heckmann Building Products Inc. manufactures its building products from sheet steel, bar and coil stock, and wire in Plain Steel, Mill Galvanized Steel, Electro Galvanized After Fabrication, Hotdip Galvanized After Fabrication, and Stainless Steel. The products we manufacture present no health hazard in their natural state during use, storage, or transportation. However, operations such as flame cutting, shot blasting, or welding may generate concentrations of dust particles of the alloying elements that may present hazards. All operations of this nature should be performed in well ventilated areas.


The following paragraph is the exemption for finished products which are not welded, such as the Pos-I-Tie® anchoring system and the eye and pintle combination. It is from the Code of Federal Regulations:

29 CFR Ch. XVII (7-1-92 Edition) 1910.1200 Hazard Communication. (6) (IV) Articles: (c) Definitions. ARTICLE means a manufactured item: (I) which is formed to a specific shape or design during manufacture; (II) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (III) which does not release, or otherwise result in exposure to, a hazardous chemical, under normal conditions of use.

The information contained in the MSDS reports is intended to be used for employee health and safety education and not for specification purposes.

We appreciate your business and will continue to strive to provide a high quality of service and product to meet your requirements.

Sincerely,



Paul G. Curtis
President

Heckmann Building Products Inc.
1501 N. 31st Avenue
Melrose Park, IL 60160-2911
708-865-2403

MATERIAL SAFETY DATA SHEET
STAINLESS STEEL – revised June 30, 2000

I. PRODUCT INFORMATION

Company: Heckmann Building Products Inc.,
 1501 N. 31st Avenue
 Melrose Park, IL 60160
 708-865-2403.

Trade Name: Stainless Steels
 Chemical Name: AISI/SAE Grades 300 Series, 400 Series, Special Alloys.
 Form: Anchors, Ties, Flashing, Steel Connectors.

II. PRODUCT INGREDIENTS

MATERIAL (mg/m ³)	CAS NUMBER	%WEIGHT	Exposure Limits	
			OSHA PEL (mg/m ³)	ACGIH TLV
Base Metal				
Iron (Fe)	7439-89-6	38.0-89.6	10 Oxide Fume	5 Oxide Fume
Aluminum (Al)	7429-90-5	.01-0.5	Not Established	10 Dust/5 Fume
Carbon (C)	7440-44-0	.03-2.0	Not Established	Not Established
Chromium (Cr)	7440-47-3	10-27	1.0 Chrome Metal	0.5 Chrome Fume
Cobalt (Co)	7440-48-4	.01- .75	0.1 Cobalt Metal	0.05 Cobalt Fume
Copper (Cu)	7440-50-8	.18-4.5	0.1/Fume/1.0 Dust	0.2 Fume/1.0 Dust
Manganese (Mn)	7439-96-5	2-10	5c Dust/5c Fume	5c Dust/1 Fume
Molybdenum (Mo)	7439-98-7	.04-5	15 Insoluble Comp.	10 Insoluble Comp.
Nickel (Ni)	7440-02-0	.12-34	1 Nickel Metal	1 Nickel Metal
Phosphorous (P)	7723-14-0	.01-.06	0.1 Phosphorous	0.1 Phosphorous
Selenium (Se)	7782-49-2	.01-0.3	0.2 Se Metal	0.2 Se Metal
Silicon (Si)	7440-21-3	.15-2.0	Not Established	10 Total Dust
Sulfur (S)	7704-34-9	.01-.06	13 Sulfur Dioxide	5 Sulfur Dioxide
Titanium (Ti)	7440-32-6	.01-0.7	15 Ti Eioxide	15 Ti Eioxide
Columbium (Cb)	7440-25-7		Not Established	Not Established
Tantalum (Ta)	7440-03-1	.01-1.1	5.0 Ta Metal	5.0 Ta Metal

Note: The above listing is a summary of elements used in alloying Stainless Steels. Various grades of Stainless Steel will contain different combinations of these elements. Trace elements may also be present in minute amounts. No permissible exposure limits (PEL) or threshold limit values (TLV) exist for Stainless Steels. Values shown are applicable to component elements.

III. PHYSICAL DATA

PHYSICAL FORM: Solid under normal conditions BOILING POINT: Not applicable
APPEARANCE & ODOR: Silvery gray odorless metal VAPOR PRESSURE: Not applicable
SPECIFIC GRAVITY: (H2O=1): Approx. 8 VAPOR DENSITY: Not applicable.
MELTING POINT: Approx. 2400 F - 2800 F ACIDITY/ALKALINITY: Not applicable.
SOLUBILITY IN WATER: % by weight Not Applicable %VOLATILE BY VOLUME: Not applicable.

IV. FIRE AND EXPLOSION DATA

FLASH POINT: Not applicable AUTO IGNITION TEMP: Not applicable.
FLAMMABLE LIMITS IN AIR: Not applicable.
FIRE & EXPLOSION HAZARDS-EXTINGUISHING MEDIA: Stainless steel does not present fire or explosion hazards under normal conditions. Use fire fighting methods and materials that are appropriate for surrounding fire.
Fine metal particles, such as produced in grinding and sawing, can burn. High concentration of metallic fines in the air may present an explosion hazard. Molten metal may explode on contact with water. For these fires, use dry powder or sand extinguishing media.

V. ENVIRONMENTAL HEALTH & SAFETY INFORMATION

HEALTH HAZARDS: Stainless steel products in their solid state present no inhalation, ingestion, or contact health hazard.
Operations such as burning, welding, sawing, brazing, grinding, and machining, which result in elevating the temperature of the product to, or above its melting point, or result in the generation of airborne particulates may present hazards. The major exposure hazard is inhalation. Effects of overexposure to fume and dust are as follows:
ACUTE: Excessive inhalation of metallic fumes and dusts may result in irritation of eyes, nose, and throat. High concentrations of fumes and dusts of iron-oxide, manganese, copper, and zinc may result in metal fume fever. Typical symptoms last from 12 to 48 hours and consist of a metallic taste in the mouth, dryness and irritation of the throat, chills, and fever.
CHRONIC: Chronic and prolonged inhalation of high concentrations of fumes or dust of the following elements may lead to the conditions listed opposite the element:
ALUMINUM: Irritation of the eyes, nose, and throat.
CHROMIUM: Lesions of the skin and mucous membranes, possible cancer of nose or lungs - bronchogenic carcinoma.
COBALT: Respiratory tract irritation, skin rash.
COPPER: Irritation of eyes, nose and throat, metal fume fever.
IRON: Pulmonary effects, siderosis.
Manganese: Bronchitis, pneumonitis, lack of coordination.

Molybdenum: Respiratory tract irritation, possible liver/kidney damage, bone deformity.

NICKEL: Lesions of the skin and mucous membranes, possibly cancer of nose or lungs, bronchogenic carcinoma.

PHOSPHOROUS: Necrosis of the mandible.

SELENIUM: Nasal and bronchial irritation, gastro-intestinal disturbances, garlic breath odor.

SULFUR: Edema of the lungs.

TITANIUM: No chronic debilitating symptoms indicated.

COLUMBIUM/TANTALUM: No chronic debilitating symptoms indicated.

Occupational Exposure Limits: See products ingredients Section 2. Chromium and Nickel have been identified by the International Agency for Research on Cancer and/or the National Toxicology Program as potential cancer causing agents.

EMERGENCY MEDICAL PROCEDURES: Inhalation: Remove to fresh air; if condition continues, consult a physician.

Eye Contact: Flush thoroughly with running water to remove particulate; obtain medical attention.

Skin Contact: Remove particles by washing thoroughly with soap and water. Seek medical attention if condition persists.

Ingestion: If significant amounts of metal are ingested, consult physician. If condition is voluntary, psychotherapy is advised.

OCCUPATIONAL PROTECTIVE MEASURES: Respiratory Protection: Appropriate dust/mist/fume respirator should be used to avoid excessive inhalation of particulates. If exposure limits are reached or exceeded, use NIOSH approved equipment.

Hands, Arms, and Body: Protective gloves should be worn as required for welding, burning, or handling operations.

Eyes & Face: Safety Glasses should be worn when grinding or cutting. Face shields should be worn when welding or burning.

Other clothing and Equipment: As required depending on operations and safety codes.

VI. REACTIVITY DATA

Stability: Stable under normal conditions of use, storage and transportation.

INCOMPATIBILITY (Materials to avoid): Stainless steel at temperatures above the melting point may liberate fumes containing oxides of iron and alloying elements. Avoid generation of airborne fume and dust.

VII. SPILL, LEAK & DISPOSAL METHODS

Fine turnings and small chips should be swept or vacuumed. Scrap metal can be reclaimed for rescue. Used or unused product should be disposed of in accordance with federal, state, or local laws and regulations.

VIII. ADDITIONAL PRECAUTIONS

Minimize and control operations producing airborne dust and fume. Provide adequate local and general exhaust ventilation. Maintain good housekeeping.

IX. DISCLAIMER

This MSDS is intended for use solely in safety education and environmental health training and not for specification purposes.

The information in this MSDS was obtained from usually reliable sources and is provided without and representation or warranty, express or implied regarding the accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. Heckmann Building Products Inc. assumes no responsibility and expressly disclaims liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.