MATERIAL SAFETY DATA SHEET

Section 1 – Chemical Product and Company Identification

Trade Name: **Carbon and Alloy Steels**
CAS Number: Not Applicable
Synonyms: Steels

Manufacturer Name and Address
SeverCorr, LLC
P. O. Box 1467
100 Industrial Park Road
Columbus, MS 39701

Telephone Numbers:
Director of Environmental Health & Safety
662-245-4200 ext. 4217
662-889-3653 - Cell
ChemTel 24 Hour Emergency No. (800) 255-3924

Date Entered: 8/1/07
Last Revision: 8/1/07

Section 2 – Composition/Information on Ingredients

Components	CAS No.	% Weight	Exposure Limits			
Base Metal:			**ACGIH TLV[1] (mg/m^3)**		**OSHA PEL[2] (mg/m^3)**	
Iron (Fe)	7439-89-6	Balance	5	Oxide Dust/Fume	10	Oxide Dust/Fume
Alloying Elements:						
Aluminum (Al)	7429-90-5	0-0.01	10 5	Metal Dust Welding Fume	15 5	Total Dust Respirable Fraction[3]
Antimony (Sb)	7440-36-0	<1	0.5	As Antimony	0.5	As Antimony
Arsenic (As)	7440-38-2	<1	0.01	As Arsenic (A1 Carcinogen)	0.01	As Arsenic
Beryllium (Be)	7440-41-7	<1	0.002 0.01	As Beryllium (A1 Carcinogen) As Beryllium (STEL[4])	0.002 0.005	As Beryllium As Beryllium (Ceiling[5])
Boron (B)	7440-42-8	<1	10	Oxide Dust	15	Oxide Dust
Cadmium (Cd)	7440-43-9	<1	0.01 0.002	As Cadmium (A2 Carcinogen) Respirable Fraction	0.005 0.0025	As Cadmium As Cadmium (Action Level)
Calcium (Ca)	1305-78-8	0-1	2	Oxide Dust	5	Oxide Dust
Carbon (C)	7440-44-0	0.04-0.95	10 3	Inhalable Fraction (PNOS)[6] Respirable fraction (PNOS)	15 5	Total Dust (PNOR)[7] Total Dust (PNOR)
Chromium (Cr)	7440-47-3	0.01-1	0.5	Metal	1	Metal
Cobalt (Co)	7440-48-4	<1	0.02	As Cobalt (A3 Carcinogen)	0.1	Metal/Dust/Fume
Copper (Cu)	7440-50-8	0.04-1	1 0.2	Dust Fume	1 0.1	Dust Fume
Lead (Pb)	7439-92-1	0-0.9	0.05	Dust/Fume (A3 Carcinogen)	0.05	Dust/Fume
Magnesium (Mg)	7439-95-4	0-1		Not Established		Not Established
Manganese (Mn)	7439-96-5	0.2-2	0.2	Elemental Mn and Inorg Cmpds	5	Fume (Ceiling)
Molybdenum (Mo)	7439-98-7	0.01-0.8	10	Insoluble Compounds	15	Insoluble Compounds
Niobium (Nb)	7440-03-1	0-1		Not Established		
Nickel (Ni)	7440-02-0	0.01-1	1.5	Metal	1	Metal and Insoluble Compounds
Nitrogen (N)	7727-37-9	<1		Simple Asphyxiant		Simple Asphyxiant
Phosphorous (P)	7723-14-0	0-1	0.1	Phosphorous	0.1	Phosphorous
Selenium (Se)	7782-49-2	<1	0.2	Selenium	0.2	Selenium
Silicon (Si)	7440-21-3	0-1	10	Dust	15	Dust
Sulfur (S)	7446-09-05	0-1	5.2 13	Sulfur Dioxide Sulfur Dioxide (STEL)	13	Sulfur Dioxide

Components	CAS No.	% Weight	Exposure Limits			
Alloying Elements:			**ACGIH TLV (mg/m^3)**		**OSHA PEL (mg/m^3)**	
Tin (Sn)	7723-14-0	0-1	2	Metal, Oxide and Inorganic Compounds	2	Inorganic Compounds
Titanium (Ti)	7440-32-6	0-1	10	Titanium Dioxide	15 5	Total Dust (PNOR) Total Dust (PNOR)
Tungsten (W)	7440-33-7	0-1	5 10	Insoluble Cmpds as W Insoluble Cmpds as W (STEL)		Not Established
Vanadium (V)	7440-62-2	0-1	0.05	Oxide Dust/Fume	0.5 0.1	Oxide Dust (Ceiling) Oxide Fume (Ceiling)
Zinc (Zn)	7440-66-6	0-0.01	10 5 10	Oxide Dust Oxide Fume Oxide Fume (STEL)	5 10	Oxide Fume Oxide Dust

NOTE: The above listing is a summary of elements used in alloying SeverCorr steel products. No permissible exposure limits (PEL) or threshold limit values (TLV) exist for steel. Various grades of steel will contain different combinations of these elements and/or trace materials. Exact specifications can be found by requesting a specifications sheet.

[1]TLV (Threshold Limit Value) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA (time weighted average) concentrations unless otherwise noted.

[2]PEL (OSHA Permissible Exposure Limits) are 8-hour TWA concentrations unless otherwise noted.

[3]Respirable Fraction – the concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with characteristics defined in the ACGIH TLV's and BEIs Appendix D, paragraph C.

[4]STEL – a short term exposure limit is defined as a 15 minute exposure.

[5]Ceiling – exposure which should not be exceeded during any part of the working exposure unless otherwise noted.

[6]PNOS – (Particulates Not Otherwise Specified) – These particulates are nuisance dusts containing no asbestos and <1% crystalline silica. A TWA-TLV of 10 mg/m^3 for inhalable particulate and 3 mg/m^3 for respirable particulate is recommended.

[7]PNOR – (Particulates Not Otherwise Regulated). All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by the PNOR limit which is the same as nuisance dust limit of 15 mg/m^3 for total dust and 5 mg/m^3 for the respirable fraction.

Section 3 – Hazards Identification

Emergency Overview

This formed solid metal product poses little or no immediate health or fire hazard. When this product is subjected to welding, burning, melting, sawing, brazing, grinding, or other similar processes, potentially hazardous airborne particulate and fumes may be generated. Avoid inhalation of metal dusts and fumes. Operations having the potential to generate airborne particulates should be performed in well ventilated areas and, if appropriate, respiratory protection and other person protective equipment should be used. Iron or steel foreign bodies imbedded in the cornea of the eye may product rust stains unless removed fairly promptly. Molten material may cause thermal burns.

Potential Health Effects

Primary Entry Routes: Inhalation, eye and skin contact. Steel products in the solid state do not present an inhalation, ingestion or contact hazard. However, operations such as burning, welding, sawing, brazing, machining and grinding may result in the following effects if exposures exceed recommended limits as listed in Section 2.

Target Organs: Overexposure to specific components of this product that are generated in dusts or fumes may cause adverse effects to the following organs or systems: respiratory system, eyes, skin, liver, kidney, central nervous system, and cardiovascular system.

Acute Effects:

Inhalation: Excessive exposure to high concentrations of dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tract. Excessive inhalation of fumes of freshly formed metal oxide particles from many metals can produce an acute reaction known as "metal fume fever", an influenza like illness. Symptoms consist of chills and fever, metallic taste in the mouth, dryness and irritation of the throat, cough, shortness of breath, pulmonary edema, general malaise, weakness, fatigue, muscle and joint pains, and blurred vision and usually last from 12 to 48 hours. Long-term effects from metal fume fever have not been noted.

Eye Contact: Dusts or particulates may cause irritation of the eye including redness, pain, and tearing. Rubbing the eye may scratch the cornea. Fumes may be irritating. Contact with the heated material may cause thermal burns. Particles of iron or iron compounds, which become imbedded in the eye, may cause rust stains unless removed fairly promptly. Torching or burning operations on steel products with oil coatings may produce emissions that can be irritating to the eyes.

Skin Contact: Skin contact with dusts may cause irritation or sensitization, possibly leading to dermatitis. Repeated or prolonged contact with oil residue may cause skin irritation, dermatitis or allergic reactions in sensitized individuals. Coated steel may cause skin irritation in sensitive individuals. Contact with heated metal may cause thermal burns.

Ingestion: Ingestion of harmful amounts of this product is unlikely due to its solid insoluble form. Swallowing of excessive amounts of dust may cause irritation, nausea, and/or diarrhea. This product is not expected to be acutely toxic via ingestion based on its physical and chemical properties.

Chronic or Special Toxic Effects:

Repeated exposure to fine dusts may inflame the nasal mucosa and cause changes in the lungs. Red-brown pigmentation of the eye and/or skin may also occur. Adverse health effects have been associated with welding fumes. Certain components may cause cancer or reproductive effects. Overexposure to specific components of this product that are generated in dusts or fumes may cause adverse effects to the following organs or systems: eyes, skin, liver, kidney, respiratory system, central nervous system, and cardiovascular system.

Carcinogenicity: The IARC, NTP, or OSHA do not list steel products as carcinogens. Welding fumes have been associated with adverse health effects and contain components that may cause cancer or reproductive effects. The following components are listed by IARC, NTP, or OSHA as carcinogens: nickel, chromium (hexavalent), cobalt, lead, cadmium, antimony (trioxide), arsenic, and beryllium. See Section 11 – Toxicological Information for specific information.

Chemical Surface Treatments/Coating: The possible presence of oil coatings should be considered when evaluating potential employee health hazards and exposures during handling and welding or other fume generating activities. Removal of surface coatings should be considered prior to such activities. Repeated or prolonged contact with oil residue may cause skin irritation, dermatitis or allergic reactions in sensitized individuals. Torching or burning operation on steel products with oil coatings may produce emissions that can be irritating to the eyes and respiratory tract.

Medical Conditions Aggravated by Exposure: Individuals with chronic respiratory disorders (such as asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by airborne particulate matter or fume exposure. Diseases of the skin (such as eczema) may be aggravated by exposure. Long-term inhalation exposure to high concentrations to pneumoconiotic agents (e.g. dust) may act synergistically with inhalation of oxides, fumes or dust of this product to cause toxic effects.

Section 4 – First Aid Measures

Inhalation: For over-exposure to airborne fumes and particulate, remove exposed person to fresh air. If breathing is difficult or has stopped, administer artificial respiration or oxygen as indicated. Seek medical attention promptly. Inhalation of metal fume or metal oxides may produce metal fume fever symptoms – fever, cough, chills, weakness, general malaise, nausea, vomiting, muscle cramps, and leukocytosis. Metal fume fever may be treated by bed rest, and administering a pain and fever reducing medication. Chronic exposure to dusts or particulates may result in pneumoconiosis of mixed type.

Eye Contact: Flush the eyes with large amounts of clean water lifting the eyelids for at least 15 minutes to remove particles. Seek medical attention if irritation persists. Thermal burns should be treated as medical emergencies.

Skin Contact: Remove all contaminated clothing. Wash affected areas with soap or mild detergent and water. If thermal burn has occurred, flush area with cold water and seek medical attention. If mechanical abrasion has occurred, seek medical attention.

Ingestion: Not considered an ingestion hazard. If excessive amounts of dust or particulates are ingested, seek medical attention immediately.

Section 5 – Fire Fighting Measures

Flammable Classification: Non-flammable, non-combustible
Flash Point (Method): Not Applicable
Burning Rate: Not Applicable
LEL: Not Applicable
UEL: Not Applicable
Auto-Ignition Temperature: Not Applicable
Extinguishing Media: For molten metal, use dry powder or sand. Use extinguishers appropriate for surrounding materials.
Fire Fighting PPE: Wear a NIOSH/MSHA approved self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode and full protective clothing.
Fire or Explosion Hazards: Do not use water on molten metal. Steel products do not present fire or explosion hazards under normal conditions. Fine metal particles produced form grinding or sawing can burn. High concentrations of metallic fines in the air may present an explosion hazard.
Hazardous Combustion Products: Fumes containing metal oxides and other alloying elements may be liberated at temperatures above the melting point.
Fire Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Section 6 – Accidental Release Measures

Spill/Leak Procedures: Not applicable to steel in solid state unless in the form of dust. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dusts. Avoid inhalation, eye or skin contact of dust. Avoid using compressed air. Keep fine dusts or powder away from sources of ignition. Scraps should be reclaimed for recycling. Clean-up personnel should be protected against contact with eyes and skin. Do not release into sewers or waterways. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal regulations. Some grades of steel may contain reportable quantities of alloying elements. See Section 15 – Regulatory Information for additional information.

Disposal: Follow all applicable federal, state, and local regulations. Contact your supplier or a licensed contractor detailed recommendations.

Section 7 – Handling and Storage

Handling Precautions: Practice good housekeeping. Avoid breathing metal fumes and/or dusts. Dusts may form explosive mixtures in air.

Storage Precautions: Store away from acids, strong oxidizers and incompatible materials. Stable under normal temperatures and pressures.

Section 8 – Exposure Controls / Personal Protection

Operations with the potential for generating high concentrations of airborne particulates or fumes should be evaluated and controlled as necessary.

Engineering Controls: Use engineering controls as needed to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls: Do not use compressed air to clean-up spills.

Eye Protection: Wear safety glasses or dust resistant safety goggles as required for welding, burning, sawing, brazing, grinding, or machining operations. Face shield should be used when welding or cutting.

Respiratory Protection: Follow OSHA respirator use, fitting, and training standards regulations (29 CFR 1910.134). If necessary, wear a NIOSH-approved respirator based on its suitability to provide adequate worker protection. Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. See Section 2 for component material information exposure limits.

Skin Protection: For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, gloves, and safety glasses to prevent skin and eye contact. Wear appropriate protective gloves when welding, burning or handling operations. Where an oil coating is applied to the product, wear gloves when handling. Good personal hygiene practices should be followed. Wash skin that has been exposed with soap and water and launder or dry clean soiled work clothing.

Exposure Guideline: No permissible exposure limit (PEL) or threshold limit values (TLV) exist for steel. See Section 2 – Composition / Information on Ingredients for component materials. Various grades of steel will contain different combinations of these component materials. Trace elements may also be present in minute amounts.

Section 9 – Physical and Chemical Properties

Physical State: Solid
Appearance and Odor: Metallic Gray-Black , Odorless
pH: Not Applicable
Boiling Point: Not Applicable
Melting Point: Approximately 2750 ºF
Solubility in Water: Insoluble
Specific Gravity @ 15.6 ºC: Not Applicable
Density @ 15.6 ºC: Not Applicable
Refractive Index: Not Applicable

Vapor Pressure: Not Applicable
Vapor Density: Not Applicable
Evaporation Rate: Not Applicable
% Volatile, by Volume: Not Applicable
Formula Weight: Not Applicable
Odor Threshold: Not Applicable
Viscosity: Not Applicable
Surface Tension: Not Applicable
Other Physical and Chemical Data: None

Section 10 – Stability and Reactivity

Stability: Steel products are stable under normal storage and handling conditions.
Polymerization: Hazardous polymerization will not occur
Chemical Incompatibilities: Will react with strong acids to form hydrogen gas. Do not store near strong oxidizers. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.
Conditions to Avoid: Steel at temperatures above melting point (2750 ºF) may liberate fumes containing oxides of iron and alloying elements. Avoid generation of airborne fume. Do not store with strong acids or calcium hypochlorite.
Hazardous Decomposition Products: Metallic fumes may be produced during welding, burning, grinding, and possibly machining or any situation with the potential for thermal decomposition (refer to ANSI Z49.1). Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

Section 11-Toxicological Information

There is no information available for the product as a mixture. Oil coatings should be considered when evaluating potential employee health hazards and exposures during handling and welding or other fume generating activities.

Eye Effects: Eye contact with the individual components may cause particulate irritation. Penetration of iron particles in the eye may cause an oxogenous or ocular siderosis which may be characterized by a red-brown pigmentation of the affected area.

Skin Effects: Skin contact with the individual dust components may cause physical abrasion, irritation, dermatitis, and sensitization.

Acute Oral Effects: No data available.

Chronic Effects: See Section 3 – Hazards Identification

Carcinogenicity: See Section 3 – Hazards Identification.

Mutagenicity: No data available.

Teratogenicity: No data available

Acute Inhalation Effects: Inhalation of the individual alloy components has been shown to cause various respiratory effects.

Other: No LC50 or LD50 has been established for the mixture as a whole.

Chemical	LD50 or LD_{LO} or TD_{LO}
Aluminum	No data
Boron	LD50 = 2000 mg/kg oral (mouse)
Calcium	No data
Carbon	No data
Chromium	LD_{LO} = 71 mg/kg oral (human)
Columbian	No data
Copper	TD_{LO} = 120 ug/kg oral (human)
Manganese	LD50 = 9 g/kg oral (rat)
Molybdenum	LD_{LO} = 70 mg/kg intratraechel (rabbit)
Nickel	LD_{LO} = 5 mg/kg oral (guinea pig)
Phosphorous	No data
Silicon	LD50 = 3160 mg/kg oral (rat)
Sulfur	LD50 = >8437 mg/kg oral (rat)
Titanium	No data
Vanadium	LD50 = 59 mg/kg scu (rabbit)

Iron Dusts or Fumes: Long-term exposure to iron dusts or fumes can result in a condition called siderosis which is considered to be a benign pneumoconiosis. Symptoms may include chronic bronchitis, emphysema, and shortness of breath upon exertion. Iron particles penetrated in the skin or eye may cause an exogenous or ocular siderosis which may be characterized by a red-brown pigmentation of the affected area. Ingestion overexposures to iron may affect the gastrointestinal, nervous and hematopoietic system and the liver. Iron and steel founding, but not iron or iron oxide, has been listed as potentially carcinogenic by IARC.

Welding Fumes: Fumes are generated when the product is welded. Chronic health effects (including cancer) have been associated with the fumes and dusts of individual component metals and welding fumes as a general category have been listed by IARC as a Group 2B carcinogen.

Metal Oxide Fumes or Dusts: Inhalation of metal oxide fumes or dusts of this product may result in metal fume fever – an influenza like illness. These metal oxides are produced by heating various metals including cadmium, zinc, magnesium, copper, antimony, nickel, cobalt, manganese, tin, lead, beryllium, silver, chromium, aluminum, selenium, iron, and arsenic. The most common agents involved are zinc and copper.

Cadmium: Cadmium is a listed carcinogen by NTP, OSHA, and IARC (Group 1). The lung and the kidney are the primary target organs for cadmium overexposure. Because of its cumulative nature, chronic cadmium poisoning can cause serious disease. The disease takes many years to develop and may continue to progress despite cessation of exposure. It can cause painful osteomalacia in postmenopausal women and has caused developmental effects and/or reproductive effects in male and female animals.

Chromium: Prolonged and repeated overexposure to chromium dusts or fumes may cause skin ulcers, nasal irritation and ulceration, kidney damage and cancer of the respiratory system. Cancer is generally attributed to the hexavalent form of chromium which is listed as a carcinogen by NTP and IARC (Group 1). Chromium is also a skin sensitizer.

Copper: Overexposure to copper can affect the liver. Copper dust and fume can irritate the eyes, nose and throat causing coughing, wheezing, nosebleeds, ulcers and metal fume fever. Other effects form repeated inhalation of copper fumes include a metallic or sweet taste, and discoloration of skin, teeth, or hair. Copper may cause an allergic skin reaction.

Lead: Elemental lead is listed as an IARC 2B carcinogen. The brain is the major target organ for lead exposure. Lead can accumulate in the body. Lead is a known reproductive and developmental toxin. Consequently, exposure to fumes or dust may produce signs of polyneuritis, diminished vision and tingling and loss of feeling in fingers, arms and legs. It is also associated with central nervous system disorders, anemia, kidney dysfunction and neurobehavioral abnormalities.

Manganese: Prolonged exposure to manganese dusts or fumes can cause a variety of neurological symptoms including muscle spasms, gait disturbances, tremors, and psychoses (a Parkinson-like syndrome).

Nickel: Nickel is a listed carcinogen by NTP and IARC (Group 1). Inhalation of nickel compounds has caused lung damage as well as sinus, nasal and lung cancer in laboratory animals. Prolonged and repeated contact with nickel may cause sensitization dermatitis.

Vanadium: There have been reported adverse effects from dermal, inhalation or parenteral exposure to various vanadium compounds. The respiratory tract is the major target for vanadium pentoxide toxicity. Fumes or dust can cause severe eye and respiratory irritation and systemic effects. Overexposure can cause chronic bronchitis, green tongue, conjunctivitis, pharyngitis, rhinitis, rales, chronic productive cough and tightness of the chest. Allergic reactions have also been reported resulting from skin and inhalation exposures. Vanadium is currently not regarded as a human carcinogen.

Additional Toxicity Data: See NIOSH, RTECS (NO4565500) for additional toxicity data on iron, (BD0330000) for aluminum, (ED7350000) for boron, (EV8040000) for calcium, (FF5250100) for carbon, (GB4200000) for chromium, (QT9900000) for columbium, (GL5325000) for copper, (OO9275000) for manganese, (QA4680000) for molybdenum, (QR5950000) for nickel, (VW0400000) for silicon, (WS4250000) for sulfur, (XR1700000) for titanium, (YW1355000) for vanadium.

Section 12 – Ecological Information

Aquatic Ecotoxicological Data: No data available.

Environmental Fate: No data available.

Environmental Degradation: No data available.

Soil Absorption/Mobility: No specific data available on this product as a whole, but individual components of this product have been found to be absorbed by plants from the soil. Metal dusts may migrate into soil and groundwater and be ingested by wildlife.

Section 13 – Disposal Considerations

Disposal: Recycle steel scrap whenever possible. Product dusts and fumes from processing operations should be recycled or disposed of in accordance with applicable federal, state, or local regulations. Prevent materials from entering drains, sewers, or waterways. Observe safe handling precautions.

Section 14 – Transport Information

(DOT Transportation Regulations 49 CFR 172.101)

DOT Proper Shipping Name: Not regulated
DOT Hazard Classification: Not regulated
UN/NA Number: Not Applicable
DOT Packing Group: Not Applicable
Labeling Requirements: Not Applicable
Placards: Not Applicable
DOT Hazardous Substance: Not Applicable
DOT Marine Pollutant: Not Applicable
Special Provisions (172.102): None

Section 15 - Regulatory Information

Regulatory Information: The following listing of regulations relating to a SeverCorr, LLC product is not intended to be comprehensive. The product and/or its constituents are subject to the following regulations:

OSHA Regulations:
Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): The product as a whole is not listed. However, individual components of the product are listed and dusts and fumes from this product may be hazardous – See Section 2.

EPA Regulations:
RCRA (40 CFR 261): Steel scrap is not regulated as a solid waste or a hazardous waste under this act. All product dusts and/or fumes from the processing operations may be considered a hazardous waste depending on the toxicity characteristics of the dust as defined in 40 CFR 261.24.

CERCLA Hazardous Substance (40 CFR 302.4): The product as a whole is not listed. However, it contains hazardous substances that may be reportable if released in pieces with diameters less than or equal to 0.004 inches.

Chemical	Reportable Quantity (RQ) in lbs.
Antimony	5,000
Arsenic	1
Beryllium	10
Cadmium	10
Chromium	5,000
Copper	5,000
Lead	10
Nickel	100
Phosphorous	1
Selenium	100
Zinc	1,000
Manganese compounds are also listed although no RQ is assigned to this generic or broad class.	

SARA 311/312 (40 CFR 370): Immediate (acute) health hazard and delayed (chronic) health hazard

SARA 313 (40 CFR 372.65): This product contains the following EPCRA 313 chemicals subject to the reporting requirements of the Section 313 of the Emergency Planning and Community Right-To-Know Act. Please note that if or prepackage or redistribute this product to industrial customers, SARA 313 requires that a notice be sent to those customers.

Chemical	Concentration (% by weight)
Aluminum	0 - 0.01
Antimony	<1
Arsenic	<1
Beryllium	<1
Cadmium	<1
Chromium	<1
Cobalt	<1
Copper	<1
Lead	<1
Manganese	0.2 – 2.0
Nickel	0.01 - 1
Phosphorous	<1
Selenium	<1
Vanadium	<1
Zinc	0 - 0.01

Toxic Substance Control Act (TSCA):
Components of this product are listed on the TSCA Inventory.

State Regulations:
The product as a whole is not listed in state specific regulations. However, individual components of the product are listed in the following state regulations:

Pennsylvania Right to Know: Contains regulated material in the following categories:
- Hazardous Substances: Calcium, Molybdenum, Silicon and Sulfur
- Environmental Hazards: Aluminum, Chromium, Copper, Manganese, Nickel and Vanadium (fume or dust)
- Special Hazard Substances: Chromium and Nickel

New Jersey Right to Know: Contains regulated material in the following categories:
- Hazardous Substance: Aluminum (dust and fume), Copper, Manganese, Molybdenum, Sulfur, Titanium and Vanadium (dust and fume)
- Special Hazard Substances: Calcium, Chromium, and Nickel

California Prop. 65: This product contains chemicals (antimony [oxide], arsenic, beryllium, chromium [hexavalent], cobalt, cadmium, lead, nickel) known to the State of California to cause cancer or reproductive toxicity. This product also contains cadmium and lead known to the State of California to cause birth defects or other reproductive harm.

WHMIS Classification (Canadian): D-2

Section 16 – Other Information

Prepared by: SeverCorr, LLC

Hazard Rating System:
NFPA Code:
Health = 0
Fire = 0
Reactivity = 0

HMIS Code:
Health = 1 (possible chronic hazard if airborne dusts or fumes are generated)
Fire = 0
Reactivity = 0

This product may be coated with a variety of materials (such as oils and paints). Special precautions should be taken when handling, cutting, welding, burning, and other operations that may result in the formation of fumes or dusts. Welding precautions should be taken for any airborne contaminants that may originate from components of the welding rod. Any spark or arc generated when welding or burning could be a source of ignition for combustible and flammable materials.

Disclaimer: All information appearing herein concerning this product are taken from sources or based upon data believed to be reliable. Although reasonable care has been taken in the preparation of this information, SeverCorr, LLC extends no warranties or guarantee, express or implied, makes no representations, and assumes no responsibility as to the accuracy, reliability or completeness of the information presented. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the user's responsibility to determine the suitability of the information presented herein, to assess the safety and toxicity of the product under their own conditions of use, and to comply with all applicable laws and regulations. Appropriate warnings and safe handling procedures should be provided to all handlers and users.