


REV 20170627 11:42AM Central Time

SECTION 1. PRODUCT INFORMATION

GHS PRODUCT IDENTIFIER :	STEEL STRIP - CARBON
OTHER MEANS OF IDENTIFICATION:	Carbon Steel Strip, Bi-metal Steel Strip, StructurALL, StructurALL Prime, Penetrator, Silencer, Silencer Plus, Supreme, Carbide
RECOMMENDED USE AND the RESTRICTIONS ON USE:	Cutting Tool
SUPPLIER'S DETAILS:	CONTOUR SAWS, INC. 900 Graceland Ave. Des Plaines, IL 60016
EMERGENCY PHONE NUMBER:	(847) 824-1146

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION:	Steel is considered an "article" and is not hazardous in its solid form. However, certain processes such as cutting, milling, grinding, melting, and welding could result in some hazardous materials being emitted.
HAZARD LABELS:	
SIGNAL WORD:	WARNING
HAZARD STATEMENT:	Does not pose a health hazard in its normal form. Inhalation of metal dust and fume may result from further processing by the end user. Particularly, welding, grinding, and machining activities. These potential health hazards should be evaluated by the end user.
PHYSICAL HAZARD:	None Known
HEALTH HAZARD:	Respiratory irritant (Dust/Fume) Skin Irritant (Metal Dust)
ENVIRONMENTAL HAZARD:	None Known
PRECAUTIONARY STATEMENT:	Do not breathe dust or fumes. Use in a well ventilated area. Use personal protective equipment as required. Wash thoroughly after handling. Do not eat or drink when using this product. Contaminated clothing should not be allowed out of the workplace.

SECTION 3. COMPOSITION/INFORMATION on INGREDIENTS**BASE METAL:**

No permissible exposure limits (PEL) or threshold limit value (TLV) exist for steel as a whole. The following values are applicable to component elements.

<u>Element</u>	<u>Weight %</u>	<u>CAS #</u>	<u>OSHA PEL (mg/m³)</u>	<u>ACGm TLV (mg/m³)</u>
Carbon	0.42-0.50	1333-86-4	3.50 (As carbon black)	3.50 (AS carbon black)
Chromium	0.080-1.20	7440-47-3	1.00	0.50
Iron	Balance	1309-37-1	10.00 (As iron oxide/ fume)	5.00 (As iron oxide fume)
Manganese	0.60-0.90	7439-96-5	5.00 (Ceiling limit dust)	5.00 (Ceiling limit dust) 1.00 (As fume)
Molybdenum	0.80-1.20	7439-98-7	5.00 (Soluble compounds)	5.00 (Soluble compounds)
Nickel	0.40-0.80	7440-02-0	1.00	0.10 (Soluble compounds)
Silicon	0.15-0.30	7440-21-3	None	5.00 (Respirable dust)
Vanadium	0.05-0.20	1314-62-1	0.50 (Ceiling limit dust) 0.10 (As fume)	0.05 (As dust and fume)
Tungsten	0-2.10	7440-33-7	N/A	
Cobalt	0-0.12	7440-48-4	0.1	N/A

Some or various combinations of these components may appear in products produced.

COATINGS/ RESIDUES:

RUST PROTECTION	Applicable manufacturer's SDS is attached.
MACHINING FLUID	Applicable manufacturer's SDS is attached.

SECTION 4. FIRST AID MEASURES

EYE CONTACT:	Flush eyes with plenty of water for at least 15-minutes. Seek medical attention if eye irritation persists.
SKIN CONTACT:	Skin hazards are not expected. However, maintain good personal hygiene. Wash affected areas with soap and water. Seek medical attention if an irritation persists.
INHALATION:	For treatment of overexposure to fumes and/or particulates, remove the affected individual(s) to fresh air and seek medical attention. Check for breathing and a pulse. Administer artificial respiration and CPR if necessary.
INGESTION:	Ingestion hazards are not expected. Dust may irritate mouth and throat. If ingested, seek medical attention promptly.

SECTION 5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:	Steel in its solid state will not support combustion. Use appropriate media for the surrounding materials.
HAZARDOUS COMBUSTION PRODUCTS:	All temperatures above the melting point may liberate fumes containing metal oxides and other alloying elements.
FIREFIGHTING PROTECTIVE EQUIPMENT:	Firefighters should wear self-contained NIOSH-approved breathing apparatus and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Not applicable to steel in the solid state. Avoid dust formation. Provide adequate ventilation. All clean-up personnel should protect against contact with eyes and skin.

SECTION 7. HANDLING AND STORAGE

Not applicable to steel in the solid state. Practice good housekeeping. Operations with the potential to generate high concentrations of airborne particulates should be evaluated and controlled as necessary.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

RESPIRATORY PROTECTION:	NIOSH approved dust and fume respirators should be used to avoid excessive inhalation of particulates. Respirator selection depends on the magnitude of exposure.
HAND PROTECTION:	Protective gloves should be worn as required for welding and handling operations. Do not continue to use gloves that may become saturated with cutting fluids and oils. Wash hands and any contact areas with soap and water.
EYE PROTECTION:	Use safety glasses as required for welding, sawing, and other machining operations.
ENGINEERING CONTROLS:	Local exhaust ventilation should be provided when welding, sawing, and machining to prevent excessive dust and fume exposure.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid	APPEARANCE:	Silver Gray
ODOR:	None	ODOR THRESHOLD:	N/A
pH:	N/A	MELTING POINT:	2300-2850°F
BOILING POINT:	N/A	FLASH POINT(°C):	N/A
EVAPORATION RATE:	N/A	FLAMMABILITY:	N/A
UPPER FLAMMABLE LIMIT %:	N/A	LOWER FLAMMABILITY LIMIT%:	N/A
VAPOR PRESSURE:	N/A	VAPOR DENSITY:	N/A
SOLUBILITY:	Insoluble in water	SPECIFIC GRAVITY (WATER=1@32°F):	7.5-8.5
AUTO-IGNITION TEMP (°C):	N/A		
VISCOSITY:	N/A		
OTHER INFORMATION:	N/A		

SECTION 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under normal conditions of use, storage, and transport.
HAZARDOUS CONDITIONS TO AVOID:	Contact with strong acid will release hydrogen gas. Fumes and/or gases produced from welding or burning. Fine dust formation.

SECTION 11. TOXICOLOGICAL INFORMATION

INGREDIENT	LD50 ORAL
IRON	30000mg/kg Oral Rat
MANGANESE	9000mg/kg Oral Rat
CHROMIUM	Unknown
NICKEL	>9000mg/kg Oral Rat
CARBON (as carbon black)	8000mg/kg Oral Rat
PHOSPHOROUS	No Information
MOLYBDENUM	No Information
SILICON	No Information
SULFUR	No Information

ROUTES OF ENTRY: None for steel in its solid state.

EYES: High concentrations of dust may cause irritation to the eyes.

SKIN: Prolonged skin contact with coated steel may cause skin irritation in sensitive individuals.

INHALATION: Inhalation of metal particulate or elemental oxide fumes generated during welding, burning, grinding or machining may pose acute or chronic health effects.

ACUTE EXPOSURE: MANGANESE & COPPER: Inhalation overexposure to manganese or copper (or zinc coated products) may cause metal fume fever characterized by fever and chills (i.e. flu-like symptoms) which appear 4-6 hours after exposure with no long-term effects.

SECTION 11. TOXICOLOGICAL INFORMATION (continued)

CHRONIC EXPOSURE: CHROMIUM: IARC (International Agency on Research for Cancer) lists certain hexavalent chromium compounds under its Group 1 category - "confirmed human carcinogens" and metallic chromium under its Group 3 category - "not classifiable as to their carcinogenicity to humans". Chromium metal is classified as carcinogenic by NTP (National Toxicology Program).

NICKEL: IARC lists metallic nickel under its Group 2B category - "possibly carcinogenic to humans". Nickel may cause skin sensitivity.

COBALT: Cobalt dust may result in an asthma-like condition (cough, shortness of breath). IARC lists metallic cobalt under its Group 2B category - "possibly carcinogenic to humans".

IRON: Inhalation overexposures may cause a benign pneumoconiosis (siderosis) with few or no symptoms.

MANGANESE: Existing studies are inadequate to assess its carcinogenicity. Susceptible to Parkinson's disease, metal fume fever and kidney damage.

LEAD: IARC lists lead and its inorganic compounds under its Group 2B category - "possibly carcinogenic to humans".

SECTION 12. ECOLOGICAL INFORMATION

No data available for the product as a whole. However, individual components have been found to be toxic to the environment. Metal dust may enter the soil and ground water to be ingested by wildlife.

SECTION 13. DISPOSAL CONSIDERATION

Steel scrap should be recycled whenever possible. Product dust/fumes and contaminants should be disposed of in accordance with all federal, state, and local regulations.

SECTION 14. TRANSPORTATION INFORMATION

Steel in solid form is not listed as a hazardous material under 49 CFR 172.101.

SECTION 15. REGULATORY INFORMATION

The components of the material are subject to reporting requirements of SARA section 302 (40 CFR 355 Appendix A), SARA section 313 (40 CFR 372.65), and/or CERCLA (40 CFR 302.4).

SECTION 16. OTHER INFORMATION

Proposition 65 -- WARNING: This product may contain chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

The information contained in this SDS was obtained from sources believed to be reliable by the manufacturer. However, the information is provided without any responsibility or warranty, expressed or implied regarding its accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of this product are beyond the knowledge of the manufacturer. For this and other reasons, the manufacturer does not assume 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 this product.