

SAFETY DATA SHEET

Cold-Rolled Carbon Steel Sheet Products | ASTM A1008/A1008M | OSHA HCS 16-section format

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION	
Product name	Carbon Steel Sheet Products
Other identifiers	Cold-rolled carbon steel sheet; ASTM A1008/A1008M; fabricated sheet-steel masonry hardware
SDS number	3GEN-SDS-CSSHEET-001
Recommended use	Anchors, clips, plates, brackets, and other masonry accessories fabricated by 3GEN Masonry Products, Inc. from cold-rolled carbon-steel sheet.
Uses advised against	Does not cover galvanized, stainless-steel, aluminum, brass, coated, painted, or plated products unless separately identified.
Manufacturer / supplier	3GEN Masonry Products, Inc. 8620 Spruiell Street, Leeds, Alabama 35094 USA
Telephone	Toll-free 1-800-556-5785 www.3genmp.com
Emergency (24-hour)	CHEMTREC 1-800-424-9300 (US/Canada) +1-703-527-3887 (international)
Prepared / revised	2 September 2026 Version 1.0

SECTION 2 - HAZARDS IDENTIFICATION

GHS classification (29 CFR 1910.1200): The finished solid sheet-steel product as supplied is not classified as hazardous. Cutting, grinding, welding, brazing, melting, or similar processing may generate hazardous dust or fume.

Signal word	None for the finished solid product as supplied.
Hazard statements	None required for the finished solid product as supplied.
Pictograms	None required for the finished solid product as supplied.
Precautionary statements	Avoid breathing dust and fume. Use local exhaust and appropriate eye, skin, and respiratory protection during processing.
Other hazards	Processing may generate iron-oxide and manganese-containing dust or fume. Fine metal dust may form combustible concentrations in air. Strong acids may release flammable hydrogen. Sheet edges, burrs, heavy parts, and hot metal can cause serious physical injury. A light residual mill oil may be present on some sheet and can generate irritating decomposition products when heated.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

ASTM A1008/A1008M covers multiple cold-rolled carbon-steel designations. The representative ranges below encompass common carbon-sheet products; the applicable mill test report controls for a specific heat.

Ingredient	CAS No.	Representative wt. %	Notes
Iron	7439-89-6	Typically >97	Base metal
Manganese	7439-96-5	0-2.0	Alloy constituent
Carbon	7440-44-0	0-0.25	Alloy constituent
Phosphorus	7723-14-0	Typically <0.15	Residual / grade-dependent
Sulfur	7704-34-9	Typically <0.05	Residual / grade-dependent
Other residual elements	Mixture	Trace / grade-dependent	Per mill certification

SECTION 4 - FIRST-AID MEASURES

Inhalation. Move to fresh air. Keep comfortable for breathing. Seek medical attention if symptoms develop or persist.

Skin. Wash dust or oil from skin with soap and water. Remove contaminated clothing. Obtain prompt first aid for cuts. Cool thermal burns with clean running water; do not remove solidified metal. Seek medical attention.

Eyes. Flush cautiously with water for at least 15 minutes. Remove contact lenses if easy to do. Embedded iron particles require prompt professional removal because they can cause rust staining and tissue injury.

Ingestion. Not an expected route. Rinse mouth; do not induce vomiting. Seek medical advice if symptoms occur.

Most important symptoms. Dust or fume may cause eye, skin, and respiratory irritation, coughing, sore throat, headache, or nausea. Hot metal can cause severe burns. Treat symptomatically.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable media	Use media appropriate for the surrounding fire. For burning metal fines, use dry sand or an extinguishing agent suitable for metal fires.
Unsuitable media	Do not apply water to molten metal. Avoid methods that disperse burning dust.
Specific hazards	Solid sheet steel is not combustible under ordinary conditions. Fine metal dust may burn or explode when dispersed in air. High heat can produce metal-oxide fumes and decomposition products from residual oils.
Protective equipment	Wear full protective clothing and positive-pressure self-contained breathing apparatus when smoke, dust, or fumes are present.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions. Beware of sharp edges and unstable stacked material. Use gloves and safe lifting practices. Avoid breathing dust or fume and keep metal fines away from ignition sources.

Clean-up. Collect solid material mechanically for reuse or recycling. Vacuum fines with equipment suitable for combustible metal dust or sweep carefully without raising dust. Do not use compressed air.

Environmental precautions. Prevent metal-bearing fines, sludge, oil, and process water from entering drains, soil, or surface water.

SECTION 7 - HANDLING AND STORAGE

Safe handling. Wear cut-resistant gloves. Use mechanical aids for sheets, bundles, or fabricated products that are heavy, awkward, or capable of shifting. Guard sharp edges and pinch points. Provide local exhaust for cutting, grinding, welding, brazing, or heating. Wash hands after contact with dust or mill oil.

Storage. Store dry, flat or properly restrained, and protected against sliding, toppling, or collapse. Keep away from strong acids and strong oxidizers. Protect from moisture where corrosion is undesirable.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Limits apply to airborne contaminants generated during processing, not to the intact finished article.

Substance	OSHA PEL	NIOSH REL	Form / note
Iron oxide	10 mg/m3	5 mg/m3	Fume, as Fe
Manganese compounds	5 mg/m3 ceiling	1 mg/m3 TWA; 3 mg/m3 STEL	Dust/fume, as Mn
Particulates not otherwise regulated	15 mg/m3 total; 5 mg/m3 respirable	-	Dust
Mineral oil mist, if present	5 mg/m3	5 mg/m3 TWA; 10 mg/m3 STEL	Airborne mist

Engineering controls. Use local exhaust at the source and maintain airborne concentrations below applicable limits. Prevent dust accumulation.

Respiratory protection. If controls are insufficient, use a NIOSH-approved respirator selected under an OSHA-compliant respiratory-protection program.

Eye / skin protection. Wear safety glasses with side shields and cut-resistant gloves. Use goggles or a face shield for flying particles and appropriate welding protection for hot work. Wear protective footwear and clothing suitable for sharp or hot material.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance / form	Solid sheet, stampings, formed parts, anchors, clips, plates, brackets, or related hardware
Color	Gray to silver metallic; may have a light oil film
Odor / threshold	Odorless, except possible mild oil odor / not established
pH	Not applicable
Melting range	Approximately 1,425-1,540 C (2,597-2,804 F), grade-dependent
Boiling point	Not applicable to the finished alloy
Flash point / flammability	Not applicable to solid steel; residual oil and fine metal dust require separate consideration
Relative density	Approximately 7.8
Solubility in water	Insoluble
Vapor pressure / viscosity	Not applicable

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Not reactive under recommended handling and storage conditions.
Chemical stability	Stable as supplied.
Hazardous reactions	Strong acids may attack steel and release flammable hydrogen gas. Fine metal dust may present a combustion or explosion hazard.
Conditions to avoid	Uncontrolled dust generation or accumulation; contact of molten metal with water; incompatible chemicals.
Incompatible materials	Strong acids, strong oxidizers, and calcium hypochlorite, particularly in contact with iron-oxide dust.
Hazardous decomposition	Iron oxide, manganese-containing fume, and other metal oxides may form during welding, thermal cutting, melting, or fire. Residual oil may produce irritating smoke or decomposition products.

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely routes. Processing may create dust or fume that can be inhaled or contact the eyes and skin. The intact article is not an inhalation hazard.

Acute effects. Dust may mechanically irritate the eyes, skin, nose, and throat. Metal fume may cause respiratory irritation and flu-like symptoms. Residual oil may irritate skin after repeated contact. Hot material causes thermal burns.

Iron / iron oxide. Repeated excessive inhalation of iron-oxide fume or dust may cause benign lung changes known as siderosis.

Manganese. Prolonged or repeated excessive inhalation of manganese-containing dust or fume may affect the central nervous system, with symptoms including weakness, movement changes, or behavioral effects.

Carcinogenicity. The defined carbon-steel sheet product is not classified in this SDS as carcinogenic based on its specified composition. IARC classifies welding fumes as carcinogenic to humans (Group 1); fume hazards depend on the process, consumables, surface condition, and contaminants.

Medical conditions aggravated. Persons with asthma or other respiratory disorders may be more susceptible to excessive dust or fume. Persons with existing skin conditions may be more susceptible to oil or dust irritation.

Other endpoints. The article has not been tested as a whole and is not classified here for acute toxicity, corrosion, serious eye damage, sensitization, mutagenicity, reproductive toxicity, or aspiration hazard.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	The intact solid article presents low immediate aquatic hazard. Metal ions, oil, or processing residues may affect aquatic organisms.
Persistence / degradability	Metals are persistent and do not biodegrade; residual oil may degrade depending on formulation.
Bioaccumulative potential	Not determined for the product as a whole.
Mobility in soil	Low for massive steel; greater for corrosion products and process residues.
Other adverse effects	Do not discharge metal-bearing dust, sludge, oil, pickling solution, or process wastewater without treatment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle as carbon-steel scrap whenever practicable. Dispose of product and processing wastes under applicable federal, state, and local requirements. Dust, sludge, spent solutions, oil-contaminated waste, or other process residues must be characterized by the generator before disposal.

SECTION 14 - TRANSPORT INFORMATION

DOT / ADR / IATA / IMDG	Not regulated as a hazardous material or dangerous good in finished solid form.
UN number / shipping name	Not applicable
Hazard class / packing group	Not applicable
Marine pollutant	No, as a finished solid article
Special precautions	Secure sheet, bundles, and fabricated products against shifting, sliding, or release during transport.

SECTION 15 - REGULATORY INFORMATION

TSCA. The constituent elements are listed on, or otherwise compliant with, U.S. TSCA inventory requirements.

EPCRA / SARA Title III. Manganese compounds may be subject to Section 313 reporting when applicable thresholds and reporting criteria are met.

California Proposition 65. This product is not intentionally formulated with a Proposition 65-listed constituent; however, commercial steel may contain incidental trace impurities not included in the grade limits. Applicable mill certifications and actual exposure conditions must be evaluated before determining warning obligations.

OSHA article status. This SDS addresses foreseeable processing hazards. Applicability of the article exemption depends on use and whether hazardous chemicals are released under normal conditions.

HMIS	Health 1* Flammability 0 Physical Hazard 0 (*dust/fume processing hazard)
NFPA	Health 1 Flammability 0 Instability 0

SECTION 16 - OTHER INFORMATION

This SDS covers 3GEN anchors, clips, plates, brackets, and other masonry accessories fabricated from cold-rolled carbon-steel sheet conforming to ASTM A1008/A1008M.

It does not cover galvanized, stainless-steel, aluminum, brass, painted, plated, or otherwise coated sheet products. Composition varies among ASTM A1008/A1008M designations; the applicable mill test report controls for a particular heat.

The information is believed accurate as of the revision date and is provided as guidance. Processing and use conditions are outside 3GEN Masonry Products, Inc.'s control. Users must evaluate their operations, maintain appropriate controls and PPE, and comply with applicable requirements.

Prepared by	3GEN Masonry Products, Inc. - Product Technical / EHS
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24-hour emergency	CHEMTREC 1-800-424-9300