

COATED METAL STUDS & METAL TRACKS — FRAMING PRODUCTS

Cold-Formed Steel Framing Components and Accessories| Drywall • Curtain Wall • Load Bearing Systems

SECTION 1 – IDENTIFICATION

Product Identifier	Coated Metal Steel Studs & Steel Tracks
Use / Description	Coated Steel Studs & Tracks for Metal framing products
Products	Cold-Formed Steel Framing components and accessories for drywall, curtain wall and load bearing systems
Synonyms	Hot Band, Cold Rolled, P&O, Galvanized
Manufacturer / Supplier	King Steel Studs
Corporate Address	605 Newsome Road, King, NC 27021
Business Phone	855-553-6955
Emergency Phone (24-Hr)	CHEMTREC: 1-800-424-9300
Website / Email	www.kingsteelstuds.com rosario@kingsteelstuds.net
SDS No.	KSS-001
Original Issue Date	04/28/2026

SECTION 2 – HAZARD(S) IDENTIFICATION

Coated Steel Sheet is considered an article under REACH Regulation (EC) No 1907/2006 and is not subject to classification under CLP Regulation (EC) No 1272/2008. However, it is not exempt as an article under OSHA's Hazard Communication Standard (29 CFR 1910.1200) due to its downstream use; this product is therefore considered a mixture and a hazardous material.

2(a) GHS Classification / Hazard Summary:

Hazard Classification	Signal Word	Hazard Symbol	Hazard Statement(s)
Carcinogenicity – 2 Reproductive Toxicity – 2 STOT Repeated Exposure – 1	DANGER		Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure.
Acute Toxicity-Oral – 4 Skin Sensitization – 1 STOT Single Exposure-3 Eye Irritation – 2B	WARNING		Harmful if swallowed. May cause an allergic skin reaction. Harmful in contact with skin. May cause respiratory irritation. Causes Eye Irritation

2(b) Precautionary Statements:

Prevention	Response	Storage / Disposal
- Do not breathe dusts / fume / gas / mist / vapor / spray. - Wear protective gloves / protective clothing / eye protection / face protection. - Contaminated work clothing must not be allowed out of the workplace. - Use only outdoors or in well-ventilated areas. - Wash thoroughly after handling. - Obtain special instructions before use. - Do not handle until all safety precautions have been read and understood. - Do not eat, drink or smoke when using this product.	- If inhaled: Remove person to fresh air and keep comfortable for breathing. - If exposed, concerned or feel unwell: Get medical advice/attention. - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing. - If on skin: Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse. - Call a poison center/doctor if you feel unwell.	Dispose of contents in accordance with federal, state, and local regulations.

2(c) Hazards not otherwise classified: None Known

2(d) Unknown acute toxicity statement (mixture): None Known

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS
3(a–c) Base Metal Components:

Chemical Name	CAS Number	EC Number	% Weight
Iron	7439-89-6	231-096-4	95 – 99.9
Manganese	7439-96-5	231-105-1	0.2 – 2.0
Aluminum	7429-90-5	231-072-3	0.04 - 0.05
Chromium	7440-47-3	231-157-5	0.02 – 0.03
Silicon	7440-21-3	231-130-8	0.01 – 0.05
Nickel	7440-02-0	231-111-4	0.004 – 0.08

CAS = Chemical Abstract Service | EC = European Community

- All commercial steel products contain small amounts of various trace or residual elements originating in raw materials. These may include: aluminum (0.01–0.5%), boron ($\leq 0.005\%$ max), calcium ($\leq 0.005\%$ max), carbon (0.6% max), chromium (0.7% max), copper (0.4% max), molybdenum ($\leq 0.4\%$ max), phosphorous ($\leq 0.1\%$ max), sulfur ($\leq 0.04\%$ max), titanium ($\leq 0.15\%$ max), vanadium ($\leq 0.15\%$ max), and others (antimony, arsenic, cadmium, cobalt, lead, zirconium).
- Percentages are expressed as typical ranges or maximum concentrations of trace elements for hazard communication purposes. Consult product specifications for specific composition information.
- Product surfaces may be treated with corrosion-inhibiting oil (mineral oil or petroleum distillates), paints, epoxies, or laminates. Refer to the coating manufacturer's SDS for coating-specific hazard information.

Base Metal Coating (if applicable):

Chemical Name	CAS Number	EC Number	% Weight
Aluminum	7429-90-5	231-072-3	0 – 85%
Nickel (Ni) – ZnNi EG	7440-02-0	231-111-4	10 – 30%
Galvalume	Mixture	Mixture	98% min
Zinc – Galvanize (GI) / Galvanneal (GA) / ZnNi EG	7440-66-6	231-175-3	GI: 99% min / GA: 85% min / ZnNi: 70–90%

Other Coatings (if applicable) — <0.8% total:

Chemical Name	CAS Number	EC Number	% Weight
Barium Chromate	10-2944-03	231-157-5	10%
Chem Phos 2007	Varies	Varies	0.004 – 0.017%
Chem Treat – Chrome	7440-47-3	231-157-5	0.3 – 12 MG/FT ²
Epoxy Resin	Varies	Varies	40 – 60%
Phosphate Treat	7664-38-2	231-633-2	100 – 200 MG/FT ²
Silicates	Varies	Varies	3 – 30%
Zinc Potassium Chromate	11103-86-9	234-329-8	1%

SECTION 4 – FIRST-AID MEASURES
4(a) Description of Necessary Measures:

Inhalation	Product as sold/shipped is not a likely form of exposure. During further processing (welding, grinding, burning, etc.): Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention.
Eye Contact	Product as sold/shipped is not a likely form of exposure. During further processing: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash thoroughly after handling. Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse. If exposed, concerned or feel unwell: Get medical advice/attention.
Ingestion	Product as sold/shipped is not a likely form of exposure. During further processing: Call a poison center/doctor if you feel unwell. Rinse mouth. If exposed, concerned or feel unwell: Get medical advice/attention.

4(b) Most Important Symptoms/Effects, Acute and Delayed (Chronic):

Product as sold/shipped is not likely to present acute or chronic health effects via inhalation, eye, skin, or ingestion routes. During further processing (welding, grinding, burning, etc.) individual components may elicit acute or chronic health effects — refer to Section 11.

4(c) Immediate Medical Attention and Special Treatment: None Known

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Not Applicable for product as sold/shipped. Use extinguishers appropriate for surrounding materials. Do NOT use direct water stream on molten metal — may cause violent steam explosion.
Specific Hazards from Chemical	Not Applicable as sold/shipped. When burned, toxic smoke, fume, and vapor may be emitted including oxides of iron, manganese, and other alloying elements.
Special PPE for Firefighters	Self-contained NIOSH-approved respiratory protection (SCBA) and full protective clothing with thermal protection required when fumes and/or smoke are present. Heat and flames cause emission of acrid smoke and fumes.
Firefighting Precautions	Do not release runoff from fire control methods to sewers or waterways. Direct water stream will scatter and spread flames — do not use.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions / PPE	Not Applicable for product as sold/shipped. For spills involving finely divided particles, protect against eye and skin contact. If material is in a dry state, avoid inhalation of dust. Refer to Section 8 for PPE requirements.
Methods for Containment & Cleanup	Not Applicable as sold/shipped. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow 29 CFR 1910.120 and all other applicable OSHA requirements.
Environmental Precautions	Prevent entry into drains, waterways, or sewers. Report releases as required by applicable local and federal regulations.

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling	Not Applicable as sold/shipped. However, further processing (welding, burning, grinding, etc.) with potential for generating high concentrations of airborne particulates should be evaluated and controlled. Obtain special instructions before use. Use only outdoors or in well-ventilated areas. Practice good housekeeping. Avoid breathing metal fumes and/or dust. Do not eat, drink, or smoke when using this product. Wear cut-resistant gloves and sleeves when working with steel products.
--------------------------------------	--

Conditions for Safe Storage	Store away from strong acids and incompatible materials. Protect from moisture. Keep in dry, covered storage areas. Secure against physical damage.
Incompatibilities (Storage)	Strong mineral acids, calcium hypochlorite, oxidizing agents.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8(a) Occupational Exposure Limits (OELs):

Product as sold/shipped in its physical form does not present an inhalation, ingestion, or contact hazard; the following OELs would not apply. However, operations such as burning, welding, sawing, brazing, machining, and grinding may produce fumes and/or particulates. The following limits are offered as reference for review by an experienced industrial hygienist.

Ingredient	OSHA PEL	ACGIH TLV	NIOSH REL	IDLH
Iron	10 mg/m ³ (as iron oxide fume)	5.0 mg/m ³ (as iron oxide dust & fume)	5.0 mg/m ³ (as iron oxide dust & fume)	2,500 mg Fe/m ³
Manganese	(C) 5.0 mg/m ³ (as fume & Mn compounds)	0.2 mg/m ³ (C)	(C) 5.0 mg/m ³ ; 1.0 mg/m ³ (as fume); (STEL) 3.0 mg/m ³	500 mg Mn/m ³
Nickel	1.0 mg/m ³ (as Ni metal & insoluble compounds)	1.5 mg/m ³ (inhalable fraction, Ni metal); 0.2 mg/m ³ (Ni inorganic insoluble & soluble)	0.015 mg/m ³ (as Ni metal & insoluble and soluble compounds)	10 mg/m ³ (as Ni)
Silicon	15 mg/m ³ (total dust, PNOR); 5.0 mg/m ³ (respirable fraction, PNOR)	10 mg/m ³	10 mg/m ³ (total dust); 5.0 mg/m ³ (respirable dust)	NE
Aluminum	15 mg/m ³ (total dust, PNOR) 5.0 mg/m ³ (as respirable fraction, PNOR)	10 mg/m ³ (as metal dust) 5.0 mg/m ³ (as welding fume)	10 mg/m ³ (as total dust) 5.0 mg/m ³ (as respirable dust)	NE
Chromium	15 mg/m ³ (total dust, PNOR) 5.0 mg/m ³ (as respirable fraction, PNOR)	10 mg/m ³ (as metal dust) 5.0 mg/m ³ (as welding fume)	10 mg/m ³ (as total dust) 5.0 mg/m ³ (as respirable dust)	NE

NE = None Established | (C) = Ceiling limit | STEL = Short-Term Exposure Limit | PNOR = Particulates Not Otherwise Regulated

8(b) Appropriate Engineering Controls:

- Use controls as appropriate to minimize exposure to metal fumes and dusts. Provide general or local exhaust ventilation (LEV) systems to minimize airborne concentrations.
- Local exhaust ventilation is necessary for use in enclosed or confined spaces.
- Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current OELs.

Personal Protective Equipment (PPE):

Respiratory Protection	Seek professional advice prior to respirator selection. Follow OSHA 29 CFR 1910.134 and use only NIOSH-approved respirator if required. Half-face P100 = up to 10× OEL; Full-face P100 = up to 50× OEL; For concentrations >50× OEL or unknown: supplied-air SCBA required. WARNING: Air-purifying respirators do not protect in oxygen-deficient atmospheres.
Eye / Face Protection	Safety glasses or goggles as required. Use appropriate eye protection to prevent eye contact. For welding, burning, sawing, brazing, grinding, or machining operations, use safety glasses or goggles. Contact lenses should not be worn where industrial exposures are likely.
Skin / Hand Protection	Wear appropriate protective clothing to prevent skin contact. Cut-resistant gloves and sleeves required when handling steel products. Protective gloves required for welding, burning, or handling operations. Contaminated work clothing must not be allowed out of the workplace.
Other Protective Equipment	Eyewash fountain and deluge shower should be readily available in the work area.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color)	Solid, Metallic Gray	Odor	Odorless
Odor Threshold	Not Applicable (NA)	pH	NA
Melting Point / Freezing Point	~2750°F (~1510°C)	Initial Boiling Point and Range	Not Determined (ND) for product as a whole
Flash Point	NA	Evaporation Rate	NA
Flammability (solid, gas)	Non-flammable, non-combustible	Upper/Lower Flammability or Explosive Limits	NA
Vapor Pressure	NA	Vapor Density (Air = 1)	NA
Relative Density	7.85	Solubility(ies)	Insoluble
Partition Coefficient (n-octanol/water)	ND	Auto-ignition Temperature	NA
Decomposition Temperature	ND	Viscosity	NA

NA = Not Applicable | ND = Not Determined for product as a whole

SECTION 10 – STABILITY AND REACTIVITY

Reactivity	Not Determined (ND) for product in solid form. Do not use water on molten metal.
Chemical Stability	Steel products are stable under normal storage and handling conditions.
Possibility of Hazardous Reactions	None Known
Conditions to Avoid	Storage with strong acids or calcium hypochlorite.

Incompatible Materials	Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.
Hazardous Decomposition Products	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

The following toxicity data has been determined for Coated Steel Sheet when further processed, using information available for its components applied to GHS/OSHA SDS requirements.

Hazard Classification	OSHA Category	Hazard Symbols	Signal Word	Hazard Statement
Acute Toxicity Hazard (Cat. 1–4)	4		Warning	Harmful if swallowed.
Eye Damage/Irritation (Cat. 1, 2A, 2B)	2B		Warning	Causes eye irritation.
Skin/Dermal Sensitization (Cat. 1)	1		Warning	May cause an allergic skin reaction.
Carcinogenicity (Cat. 1A, 1B, 2)	2		Warning	Suspected of causing cancer.
Toxic Reproduction (Cat. 1A, 1B, 2)	2		Warning	Suspected of damaging fertility or the unborn child.
STOT Following Single Exposure (Cat. 1–3)	3		Warning	May cause respiratory irritation.
STOT Following Repeated Exposure (Cat. 1–2)	1		DANGER	Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure.

Acute Effects:

- **Inhalation:** Excessive exposure to high concentrations of metal dust may irritate eyes, skin, and mucous membranes of the upper respiratory tract. Freshly formed metal oxide fumes (particles sized 0.02–0.05 µm, typically below 1.5 µm) can produce 'metal fume fever' — symptoms include chills, fever, metallic taste, dryness/irritation of throat, weakness, and muscle pain. Symptoms appear within a few hours of excessive exposure and usually last 12–48 hours. Freshly formed manganese oxide fumes are associated with metal fume fever.
- **Eye:** Excessive exposure to metal dust may cause eye irritation.
- **Skin:** Skin contact with metal dusts may cause irritation or sensitization, possibly leading to dermatitis. Physical abrasion from metallic fumes and dusts.
- **Ingestion:** Ingestion of harmful amounts unlikely due to solid, insoluble form. Metal dust ingestion may cause nausea or vomiting.

Acute Effects by Component:

- Iron and iron oxides: Harmful if swallowed; causes skin irritation and eye irritation. Iron particles embedded in the eye may cause rust stains unless removed promptly.
- Manganese and manganese oxides: Harmful if swallowed.
- Nickel and nickel oxides: Nickel may cause allergic skin sensitization. Nickel oxide may cause an allergic skin reaction.
- Silicon and silicon oxides: May be harmful if swallowed.

Delayed (Chronic) Effects by Component:

- Iron and iron oxides: Chronic inhalation of excessive iron oxide fumes/dusts may result in siderosis (benign pneumoconiosis visible on X-ray with no associated lung function impairment). Excessive ferric oxide inhalation may enhance lung cancer risk in workers exposed to pulmonary carcinogens. IARC Group 3 (not classifiable as to carcinogenicity in humans).
- Manganese and manganese oxides: Chronic exposure to high concentrations of manganese fumes/dusts may adversely affect the central nervous system — symptoms include languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression, and paralysis. Occupational overexposure is a progressive, disabling neurological syndrome. Neurobehavioral alterations include impaired speed and coordination of motor function.
- Nickel and nickel oxides: Exposure to nickel dusts and fumes can cause sensitization dermatitis, respiratory irritation, asthma, pulmonary fibrosis, edema, and may cause nasal or lung cancer. IARC Group 2B (sufficient animal data). ACGIH 2013 lists insoluble nickel compounds as confirmed human carcinogens. Nickel suspected of damaging the unborn child.
- Silicon and silicon oxides: Silicon dusts are a low health risk by inhalation; treat as nuisance dust. Eye and skin contact may cause particulate irritation and physical abrasion.

Acute Toxicity LD50/LC50 Data (Components):

- Iron: Rat LD50 = 98.6 g/kg (REACH); 1060 mg/kg (IUCLID)
- Manganese: Rat LD50 > 2000 mg/kg (REACH); > 9000 mg/kg (NLM Toxnet)
- Nickel: LD50 > 9000 mg/kg (Oral/Rat)
- Silicon: LD50 = 3160 mg/kg (Oral/Rat)

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity (Aquatic & Terrestrial)	No data available for product as sold/shipped. Individual components when processed may be toxic to the environment. Metal dusts may migrate into soil and groundwater. Iron Oxide: LC50 >1000 mg/L; Hexavalent Chrome: EU RAR Category 1 — acute EC50 and LD50 to algae and invertebrates <1 mg; Nickel Oxide: IUCLID LC50 in fish, invertebrates, algae >100 mg/L.
Persistence & Degradability	No Data Available for product as sold/shipped or individual components.
Bioaccumulative Potential	No Data Available for product as sold/shipped or individual components.
Mobility in Soil	No data available for product as sold/shipped. Individual components of the product have been found to be absorbed by plants from soil.
Other Adverse Effects	None Known

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Methods	Steel scrap should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable federal, state, or local regulations.
Container Cleaning and Disposal	Follow applicable federal, state, and local regulations. Observe safe handling precautions.
European Waste Catalogue (EWC)	16-01-17 (ferrous metals), 12-01-99 (wastes not otherwise specified), 16-03-04 (off-specification batches and unused products), 15-01-04 (metallic packaging).
Important Note	This disposal information is for Coated Steel Sheet in its original form. Any alterations can void this information.

SECTION 14 – TRANSPORT INFORMATION

Coated Steel Sheet is NOT regulated as a hazardous material by any of the following transport authorities in its standard sold/shipped form:

DOT (49 CFR 172.101)	Not regulated. All federal, state, and local laws and regulations applicable to transport of this material must be adhered to.
IMDG (International Maritime)	Classification, packaging, and shipping requirements follow US DOT Hazardous Materials Regulation. Not regulated.
ADR (International Road – Europe)	Does not regulate Coated Steel Sheet as a hazardous material.
IATA (International Air)	Does not regulate Coated Steel Sheet as a hazardous material.
TDG (Transport Dangerous Goods – Canada)	Coated Steel Sheet does not have a TDG classification.
UN Number / Shipping Name	Not Applicable
Hazard Class / Packing Group	Not Applicable
DOT Reportable Quantities	Not Applicable

SECTION 15 – REGULATORY INFORMATION

NOTE: The following listing of regulations may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.

Federal Regulations:

OSHA Air Contaminants	29 CFR 1910.1000, Table Z-1, Z-2, Z-3: Product as a whole not listed. Individual components listed — refer to Section 8.
EPA – Manganese	CAA (Clean Air Act), SARA 313, SDWA
EPA – Nickel	CAA, CERCLA, CWA, SARA 313
SARA 311/312 Hazard Categories	Immediate Acute Health Hazard; Delayed Chronic Health Hazard
TSCA	All components are listed on TSCA inventory or are exempt.

SARA Section 313 Supplier Notification:

The product contains the following toxic chemicals subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act and 40 CFR Part 372:

CAS Number	Chemical Name	Percent by Weight
7439-96-5	Manganese	2.0% max
7440-02-0	Nickel	0.5% max

State Regulations:

California Prop. 65	Contains elements known to the State of California to cause cancer or reproductive toxicity, including Nickel. For more information: www.P65Warnings.ca.gov
Pennsylvania Right to Know	Hazardous Substances: Manganese and Silicon. Environmental Hazards: Manganese and Nickel. Special Hazardous Substance: Nickel.
New Jersey	Hazardous Substance: Manganese and Nickel.
Minnesota	Regulated: Manganese, Nickel, Silicon.
Massachusetts	Regulated: Manganese and Nickel.

WHMIS Classification (Canadian):

Ingredient	WHMIS Classification
Iron	B4
Manganese	B4
Nickel	D2A

SECTION 16 – OTHER INFORMATION

Prepared By	King Steel Studs — Safety Department
Original Issue Date	05/12/2026
SDS Format	GHS / OSHA 29 CFR 1910.1200 — 16-Section Format

HMIS CLASSIFICATION	NFPA RATING
Health: 1 (Possible chronic hazard if airborne dusts/fumes generated; irritation or minor reversible injury possible) Fire: 0 (Materials that will not burn) Physical Hazard: 0 (Normally stable, non-reactive, non-explosive)	Health: 1 (Exposure could cause irritation; only minor residual injury even if no treatment given) Flammability: 0 (Materials that will not burn) Instability: 0 (Normally stable; not reactive with water)

Key Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists	NIOSH	National Institute for Occupational Safety and Health
BEIs	Biological Exposure Indices	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CFR	Code of Federal Regulations	PEL	Permissible Exposure Limit
CNS	Central Nervous System	PNOR	Particulate Not Otherwise Regulated
GHS	Globally Harmonized System	PPE	Personal Protective Equipment
HMIS	Hazardous Materials Identification System	RCRA	Resource Conservation and Recovery Act
IARC	International Agency for Research on Cancer	SARA	Superfund Amendment and Reauthorization Act
LC50	Median Lethal Concentration	SCBA	Self-Contained Breathing Apparatus
LD50	Median Lethal Dose	STEL	Short-Term Exposure Limit
LEL	Lower Explosive Limit	TLV	Threshold Limit Value
MSHA	Mine Safety and Health Administration	TWA	Time-Weighted Average
NFPA	National Fire Protection Association	UEL	Upper Explosive Limit

DISCLAIMER: This information is taken from sources believed to be reliable. King Steel Studs' objective in providing this SDS is to help protect the health and safety of personnel and to support compliance with the OSHA Hazard Communication Standard and Title III of the Emergency Planning and Community Right-to-Know Act. King Steel Studs makes no warranty as to the absolute correctness, completeness, or sufficiency of any of the foregoing information.

— END OF SAFETY DATA SHEET —