

Safety Data Sheet

Section 1 - Product Identification and Uses	
Common/Trade Name	Hot-Rolled Steel
Synonyms	Carbon steel, HR Coil, Sheet Steel
Chemical Name	Not applicable.
Chemical Formula	Not applicable.
Supplier	Full name: EZZ Flat Steel Co. (EFS) Address: Economic Industrial Zone Northwest Gulf of Suez, km 44 Suez/Hurgada Road, Ain Sokhna - Suez, Egypt Tel: +20- (62) 359 83 61 Fax: +20-(62) 359 83 79 Website: http://www.ezzsteel.com
Material Uses	Steel for metal goods and for construction use.

Section 2- Hazards Identification	
General Overview	Steel products are not hazardous per OSHA GHS 29 CFR 1910, 1915, 1926
Hazardous Statement	Steel product is not exposing any hazards; however, processes such as welding, grinding, and blasting may result in the formation of fumes and/or dust that may present some hazards as follows H317: Dust/fumes may cause an allergic skin reaction. H372: Inhalation of dust/fumes causes damage to respiratory tract through prolonged or repeated exposure. H317 - May cause an allergic skin reaction.
Precautionary statements	P202 - Do not handle until all safety precautions have been read and understood. P261 - Avoid breathing dust, fume. P280 - Wear eye protection, face protection, protective clothing, protective gloves. P302+P352 - If on skin: Wash with plenty of water. P308+P313 - If exposed or concerned: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
Other hazards which do not result in classification	Exposure to massive forms of steel presents no health hazards. Grinding, thermal cutting, or melting may produce dust or fumes. Dust or fumes may contain elemental constituents. Exposure to elemental constituents presents the hazards described in this sheet.

Section 3 - Composition and Information on Ingredients

Name	CAS#	% by Weight	Exposure Limits
			OSHA PEL (mg/m3)
Iron (Fe)	7439-89-6	93.0-99.8 (Balance)	10 iron fumes
Aluminum (Al)	7429-90-5	≤ 0.40	15 as Dust
Boron (B)	7440-42-8	≤ 0.005	10 as dust
Chromium (Cr)	7440-47-3	≤ 0.70	1.0 as chrome
Phosphorus (P)	7440-50-8	≤ 0.20	0.1 as Phosphorus
Manganese (Mn)	7439-96-5	≤ 2.00	5 as manganese
Carbon (C)	7440-44-0	0.02-0.07 and 0.16-0.25	Not listed
Silicon (Si)	7440-21-3	≤ 1.50	15 as Dust

NOTE: Various grades of steel will contain different combinations of these elements and/or trace/other materials. Exact specifications for specific products may be available upon request.

Section 4 - First Aid Measures

Eye Contact	Flush eyes with water to remove foreign body. Seek medical attention if irritation persists.
Skin Contact	Wash with soap and water to remove from skin. Seek medical attention if irritation persists.
Inhalation	Over exposure to dusts or fumes, remove to fresh air. Get immediate medical attention if symptoms described in this Safety Data Sheet (SDS) develop.
Ingestion	Not considered an ingestion hazard. However, if excessive amounts of dust or particulates are swallowed, treat symptomatically and supportively. Get medical attention.

Section 5 – Fire Fighting Measures

The product is	Does not burn and will not support combustion.
Auto-ignition temperature	Not applicable.
Fire degradation products	This product is stable under normal condition.
Flash Points	Not applicable.

Flammable Limits	Not applicable.
Fire Extinguishing procedures	Use extinguishing media suitable for surrounding materials, use dry powder or sand in case of molten metal. Don't use water on molten metal.
Flammability	Does not burn and will not support combustion.
Risks of explosion	N/A


Section 6 - Accidental Release Measures

Fire and Explosion Hazards	Steel sheets is stable under normal condition and explosion is unlikely.
Precautions if Material is Spilled or Released	In case dust generation, collect in suitable or closed containers for disposal.
Environmental precaution	Steel sheet is stable and doesn't disintegrate however some steel grades may contain some quantities of alloying elements. see section 15
Waste Disposal Methods	Steel is recyclable material however its disposal should be under federal or local regulation.

Section 7 - Handling and storage

Storage temperature	Stable under normal temperatures and pressures.
Precautions to be Taken in Handling and Storing	Avoid dust formation and don't store near strong oxidizers. Use the appropriate personal protective equipment during handling.

Section 8 – Protective Measures

Protective Clothing	Safety glasses with side shields. Wear cotton or leather faced gloves for hand protection. Use NIOSH approved respiratory protection to prevent inhalation of dust or fume.	
Engineering Controls	Use general ventilation under normal conditions. Use mechanical ventilation if dust or fume is generated.	

Section 9 - Physical Data

Physical State and Appearance	Solid: Coil/Sheet (Nominal Thickness 1.00-13.00mm).
pH	6.5-7.5 at 20 (sample: H ₂ O= 1:5 (V/V)).
Odor Threshold	Not available.
Volatility	Not available.
Melting/Sublimation Point	1565 °C.
Boiling/Condensation Point	12862 °C.
Specific Gravity	7.0-8.0 MT/m ³ .
Vapor Density	Not available.
Explosive properties	Nonexplosive.

Section 10 – Reactivity and Stability	
Stability	The product is stable under general condition.
Condition to avoid	Steel at temperatures above the melting point may liberate fumes containing oxides of iron and alloying elements. Avoid generation of airborne fume.
Degradability	Not available.
Products of Degradation	Not available.
Corrosively	Don't store near strong oxidizers, acids and bases.
Reactivity	No specific information is available in our database regarding the reactivity of this material in presence of various materials.

Section 11 - Toxicological Properties	
Routes of entry	Skin contact and Eye contact.
TLV	Permissible exposure limits have not been established for this product.
Chronic effects on humans	<p>CARINOGENIC EFFECTS: Not available MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.</p> <p>There are no chronic effects if used in its purchased form; however, if product is used in a manner that generates fumes, long term (chronic) overexposure to iron oxide fumes can lead to siderosis (iron deposits in lung). Siderosis will clear in time, when exposure to iron and its compounds ceases.</p>
Acute effects on humans	Abrasive to eyes and skin.

Section 12 - Ecological Information	
Aquatic Ecotoxicological Data	No data available.
Environmental Fate Data	No data available.

Section 13 - Disposal consideration	
Disposal	Steel is recyclable material however its disposal should be under federal or local regulations.

Section 14 - Transport Information

Department of Transportation (DOT)	Not regulated.
Air transport	Not regulated.
Transport by sea	Not regulated.

Section 15 - Regulatory Information

Egyptian Labor law	Steel is not classified as hazardous material.
US OSHA Hazards	Not applicable.

Section 16 - Other Information

Other information	<p>This SDS covers EFS product as delivered from EFS Steel mill but does not include chemicals that may be applied by subsequent handlers and/or distributors of this product. This could include a variety of materials including oils, paints, galvanization, etc. that are not included in this SDS.</p> <p>The conditions or methods of handling, storage, use or 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.</p>
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	Reviewed	Approved
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