

Issue Date: 15/04/2021
 Last Revision Date: 13/12/2023
 Superseded Date: 15/04/2021
 Version Number: 02

SAFETY DATA SHEET

Product Code: SERB10LIV

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SECTION 1 PRODUCT IDENTIFICATION

Product Name Livingstone Single Edge Razor Blades
Chemical Name Polyethylene (polyethylene) homo-polymer

SECTION 2 HAZARD IDENTIFICATION

Steel products in their usual physical state do not constitute any physical or health hazards. However, subsequent operations such as brazing, burning, cutting, grinding, heat treating, pickling, welding, or processing in any other fashion may produce potentially hazardous dust or fume which can be inhaled, swallowed, or come in contact with the skin, eyes or mucus membrane.

Possible Symptoms of Exposure to Dust, Fumes, or Gases Acute: Irritation of eyes, nose, throat & skin; metallic taste in mouth; nausea; metal fume fever.
 Chronic: Chromium and nickel fumes are suspect carcinogens and can cause sensitization (allergic reaction). Iron oxides can cause a benign lung condition (siderosis).

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Element	CAS No.	Permissible Exposure	
		OSHA PEL	ACGIH TLV
Iron	7439-89-6	10 (b)	5 (b)
Chromium	7440-47-3	1 (e)	0.5 (e)
Manganese	7439-96-5	5 (c)	1 (c)
Silicon	7440-21-3	15 (d)	10 (d)
Titanium	7440-32-6	15 (d)	10 (d)
Trace Elements	N/A	N/A	N/A

Ingredients and weight vary according to order specification. CAS - Chemical Abstract Service, N/A - Not applicable, LT - Less than
 (a) All values, unless otherwise noted, refer to 8-hour time - weighted average concentrations and units are in mg/m³.

(b) As iron oxide fume.

(c) As metal fume and dust.

(d) As dust.

(e) As metal.

(f) As fume.

Notes:

- All commercial steel products contain small amounts of various elements in addition to those listed. These small quantities are frequently referred to as "trace" or "residual" elements that generally originate in the raw materials used. These elements may include, but are not limited to the following: Arsenic, Cadmium, Calcium, Cobalt, Lead, Nitrogen, Phosphorous, Sulfur, Tin, Vanadium, Niobium and Zirconium.
- OSHA PELs (Permissible Exposure Limits) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted.
- Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. ACGIH TLVs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.

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SECTION 4 FIRST AID MEASURES

Primary Routes of Entry

Inhalation

Remove to fresh air and treat symptomatically.

Eye Contact

Flush well with running water to remove particulate; Seek medical attention immediately.

Skin Contact

Brush off excess dust. Wash area with soap & water.

Ingestion

Seek medical attention immediately.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point

N/A

Fire Point

N/A

SECTION 6 ACCIDENTAL RELEASE MEASURES

Clean-Up

N/A

Waste Disposal

Solids

Sell as scrap for reuse.

Dust

Follow central, state and local regulation regarding disposal.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling:

- The product should be handled according to the size, shape and quantity of material. It may require use of hoists, cranes etc.
- Products are likely to have sharp edges that may cause laceration and flying particles may be produced when shearing. Hence normal precautions should be taken in order to avoid physical injury.
- Extra precaution to be taken while opening the coil.

Conditions for Safe Storage

- Store away from acids or any other corrosive materials.
- Suitable racks should be used to ensure stability while stacking narrow coils.
- e storage area must be dry and clean. Any contamination from moisture /water should be avoided.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Requirements:

Local exhaust recommended while burning, grinding and or welding and airborne levels of metal oxides exceed applicable OSHA standards.

Personal Protective Equipment

Respiratory Protection

If fumes, misting or dust conditions occur and exceed applicable OSHA standards, provide NIOSH approved respirators.

Eye Protection

Recommend approved safety glasses/goggles when grinding, welding etc.

Gloves

As required.

Other Clothing

As required.

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SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odour	Solid, odourless, whitish grey
Boiling Point	N/A
Melting Point	1371-1539°C
Solubility in Water	N/A
Specific Gravity	7.9
Vapour Pressure	N/A
Vapour Density	N/A
Evaporation Rate	N/A
% Volatile	N/A
pH	N/A

SECTION 10 STABILITY AND REACTIVITY

Stability	Chemically Stable.
Incompatibility	Reacts with strong acids to form hydrogen gas.
Hazardous Decomposition Products	Fumes and/or gases produced from welding or burning operation.

SECTION 11 TOXICOLOGICAL INFORMATION

Fumes and/or gases produced from welding or burning operation.	No toxic effect would be expected from exposure to the solid form of steel product. When alloy is subjected to welding, burning, melting, sawing, brazing, grinding or other similar process, potentially hazardous airborne particulates and fumes may be generated. These operations should be performed in well-ventilated areas, and if appropriate, respiratory protection and other PPE as deemed necessary.
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SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity	No information found for the product as a whole. However, individual components of the product have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife.
Environmental Fate	No Information Found (NIF)
Environmental Degradation	NIF
Soil Absorption/Mobility	No information found for the product as a whole. However, individual components of the product have been found to be absorbed by plants from soil.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal	This material is considered to be a solid waste, not a hazardous waste. Follow applicable federal, state, and local regulations for disposal of solid waste and airborne particulates accumulated during handling operations of the product. Waste steel products can be recycled for further use.
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Disposal Regulatory Requirements None

Container Cleaning and Disposal Follow applicable federal, state and local regulations. Observe safe handling precautions.

SECTION 14 TRANSPORT INFORMATION

No special precautions required.
The product is not classified as hazardous for transport.

SECTION 15 REGULATORY INFORMATION

Regulatory Information

The following listing of regulations relating to a Jindal Stainless Limited product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.
This product and/or its constituents are subject to the following regulations:

OSHA Regulations

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-2 & Z-3): Steel products, as a whole is not listed. However, individual components of the product are listed.

EPA Regulations

RCRA

Chromium and Nickel are regulated under this act.

CERCLA Hazardous Substance (40 CFR 302.4)

The product as a whole is not listed. However, individual components of the product are listed: Chromium, Copper, Manganese compounds, Nickel and Phosphorous are listed under SARA 302.

SARA 311/312 Codes

Immediate (acute) health hazard and delayed (chronic) health hazard.

SARA 313

Aluminum (fume or dust), Chromium, Copper, Manganese, Nickel and Phosphorous are subject to SARA 313 reporting requirements. Please also note that if you prepackage or otherwise redistribute this product to industrial customers, SARA 313 requires that a notice be sent to those customers.

Clean Water Act

Chromium, Copper and Nickel are Section 307 Priority Pollutants. Phosphorus is a Section 311 hazardous chemical.

Safe Drinking Water Act

Aluminum, Chromium, Copper, Molybdenum, and Nickel are regulated under this act.

State Regulations

The product as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations. Pennsylvania Right to Know: Contains regulated material in the following categories:

- Hazardous Substances: Calcium, Molybdenum and Silicon
- Environmental Hazards: Aluminum, Chromium, Copper, Manganese, Nickel, and Phosphorous
- Special Hazard Substances: Chromium and Nickel

California Prop. 65

The product, Stainless Steel (semi-finished steel products) may possibly contain trace quantities (generally much less than 0.1%) of metallic elements known to the State of California to cause cancer or reproductive toxicity. These include chromium and nickel.

New Jersey

Contains regulated material in the following categories:

- Special Health Hazard Substances: Manganese, Nickel, and Chromium
- Hazardous Substance List: Iron (fume), Silicon, Titanium, Molybdenum, Vanadium, Tantalum, Tungsten, Aluminum (dust and fume), Chromium, Nickel, Manganese, Boron, and Copper
- Environmental Hazards: Tungsten, Nickel, Cobalt, and Chromium compounds

Other Regulations

The product as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations.
WHMIS (Canadian): D2B Product Classification

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SECTION 16 OTHER INFORMATION

Hazard Rating Systems

Hazardous Material Identification System (HMIS) Classification

Health 0, No significant risk to health.

Fire 0, Materials that will not burn.

Physical Hazards 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non explosives.

National Fire Protection Association (NFPA)

Health 0, No hazard beyond that of ordinary combustible materials.

Fire 0, Materials that will not burn.

Instability 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
HMIS	Hazardous Materials Identification System
mg/m ³	milligram per cubic meter of air
NFPA	National Fire Protection Association
NIF	No Information Found
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendment and Reauthorization Act
TLV	Threshold Limit Value
TWA	Time-weighted Average

Reason for Revision: To bring to date

END OF SDS

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