

Safety Data Sheet (SDS / MSDS)

L80 Seamless Tubing (API 5CT)

Prepared in accordance with GHS Rev. 8 / OSHA HazCom 2012

SECTION 1: Identification

Product Name	L80 Seamless Tubing (API 5CT)
Recommended Use	Oil & gas well casing and production tubing, including sour (H2S) service environments
Manufacturer/ Supplier	Ochnology Solution Pvt. Ltd.
Address	B-153, Sector-4, Defence Colony, Dehradun, Uttarakhand, India - 248001
Contact	projects@ochnology.com, bd@ochnology.com +91 9286823642/43

SECTION 2: Hazards Identification

As supplied (seamless steel tube), L80 tubing is a manufactured article and is not classified as a hazardous substance or mixture under GHS/OSHA HazCom, since it does not release a hazardous substance under normal conditions of storage, handling, or use. This document is provided as a reference for hazards that may arise during secondary processing (threading, welding, cutting, or coupling makeup), which is outside the scope of the article as supplied.

GHS Classification:

Signal Word: Not applicable to the article as supplied. **WARNING** applies to fume/dust generated during threading, welding, or cutting.

Hazard Statements:

- Not classified as hazardous in solid form as supplied.
- Machining/threading fume and cutting dust may cause respiratory irritation with prolonged/repeated exposure.

Precautionary Statements:

- Use local exhaust ventilation or fume extraction during welding, cutting, or threading operations.
- Wear appropriate respiratory protection during hot work or machining operations.

SECTION 3: Composition / Information on Ingredients

Component	CAS No.	Approx. %
Iron (Fe)	7439-89-6	Balance
Carbon (C)	7440-44-0	≤ 0.43%
Manganese (Mn)	7439-96-5	≤ 1.90%
Phosphorus (P)	7723-14-0	≤ 0.030%
Sulphur (S)	7704-34-9	≤ 0.030%
Chromium (Cr) — L80 9Cr/13Cr sub-grades only	7440-47-3	9% / 13% (grade-dependent)

SECTION 4: First-Aid Measures

- Inhalation (threading/welding fume or cutting dust): Move to fresh air; seek medical attention if symptoms persist.
- Skin contact (sharp edges/burrs/swarf): Clean wound thoroughly; seek medical attention for deep cuts.

- Eye contact (machining particulate): Flush with water; seek medical attention if irritation persists.

SECTION 5: Fire-Fighting Measures

- Non-combustible in solid tube form.
- Fine metal dust or machining swarf may be combustible; use dry powder extinguishing media, not water, on metal dust fires.

SECTION 6: Accidental Release Measures

- Not applicable to solid tube.
- Collect metal fines/swarf generated during threading or machining and handle per standard scrap metal procedures.

SECTION 7: Handling and Storage

- Store on racks or dunnage, off the ground, in a dry area to prevent corrosion; use thread protectors on both ends.
- Use local exhaust ventilation and appropriate PPE during welding, cutting, or threading operations.
- Handle with appropriate lifting equipment (tube lifters/slings rated for length and weight) to avoid injury and tube damage.

SECTION 8: Exposure Controls / Personal Protection

Exposure controls below apply to secondary processing operations (welding, threading, cutting), not to the article as supplied.

- Welding fume (total particulate): OSHA PEL 5 mg/m³
- Manganese fume: OSHA PEL 5 mg/m³ (ceiling)
- Chromium compounds (9Cr/13Cr sub-grades): refer to OSHA 29 CFR 1910.1026 for hexavalent chromium controls during hot work
- Respiratory protection: fume extraction plus P100 respirator for machining/threading dust
- Eye protection: safety glasses or face shield as appropriate

SECTION 9: Physical and Chemical Properties

Appearance	Solid seamless steel tube, mill or coated finish
Odour	None
Melting Point	≈ 1450 – 1520°C
Density	≈ 7.85 g/cm ³
Yield Strength	80,000 – 95,000 psi (552 – 655 MPa)
Hardness, max	≤ 23 HRC (per NACE MR0175/ISO 15156 sour-service requirement)
Solubility in Water	Insoluble

SECTION 10: Stability and Reactivity

- Stable under normal conditions of storage and use.
- Avoid prolonged exposure to moisture, which may cause surface/pit corrosion; store with thread protectors fitted.

SECTION 11: Toxicological Information

- No hazard from the solid tube under normal handling.

- Chronic inhalation of welding fume or machining dust (containing manganese, and chromium for 9Cr/13Cr sub-grades) is associated with respiratory and neurological effects; this is a secondary-processing consideration and does not apply to the article as supplied.

SECTION 12: Ecological Information

- Not expected to be hazardous to the environment as a solid metal article.
- Scrap and processing swarf should be recycled through standard metal recycling channels.

SECTION 13: Disposal Considerations

- Recycle as scrap metal wherever possible.
- Dispose of processing waste (swarf, cutting/threading dust) per local regulations.

SECTION 14: Transport Information

Not classified as dangerous goods for transport.

SECTION 15: Regulatory Information

- Classified as a manufactured article under GHS/OSHA HazCom 2012 — not required to be accompanied by an SDS for the article itself.
- L80 is manufactured to API 5CT specification; sour-service (H2S) applications should confirm compliance with NACE MR0175/ISO 15156 requirements for the specific well environment.
- This document is provided as a courtesy reference addressing downstream (secondary processing) hazards only.

SECTION 16: Other Information

This SDS is provided for informational purposes regarding secondary processing (threading, welding, cutting, coupling makeup) hazards. The product, as supplied, is a solid metal article and is not classified as a hazardous substance or mixture under GHS. Mill Test Certificate (MTC) and API 5CT Certificate of Compliance accompany each shipment and address chemical/mechanical properties for the specific heat/lot supplied.

Disclaimer: Information is provided as a general guide based on available data and is subject to revision without notice. Buyers/users should conduct their own risk assessment and confirm suitability for their specific process and application.