

MATERIAL SAFETY DATA SHEET

Product Identification:- Thermic Lance

1. Hazardous Ingredients

Chemical Name/Common Name	(CAS No.)	%	Exposure Limits	
			ACGIHTLV	OSHA PEL
BASE METAL				
Iron	7439896	99 max	as Iron Oxide Fume 5	10
Alloying Elements:				
Carbon	7440440	.08 - 0.18	--	--
Manganese	7439965	.30 - .60 (dust)	5 (fume) 11	5 (c) 5 (c)
Phosphorus	7723140	.015 - .035 (yellow)	.1	.1
Sulphur	7704349	.02 max	as Sulphur Dioxide 5.2	13
Silicon	7440213	.02 max (dust) (respirable fraction)	10 --	15 5
Aluminium	7429905	.02 - .07 (dust)	10 (fume) 5	15 5
Copper	7440508	.10 max (dust)	1 (fume) .2	1 .1
Nickel	7440020	.06 max	1	1
Chromium	7440473	.05 max	.5	1
Molybdenum	7439987	.05 max	10	15

2. Physical Data

Boiling Point: N/A

Specify Gravity (H₂O = 1): N/A

Vapour Pressure (mm Hg): N/A

Melting Point: N/A

Vapour Density (Air = 1): N/A

Evaporation Rate (Butyl Acetate = 1): N/A

Solubility in Water: Insoluble

Appearance and Odour: Tubular steel - No Noticeable Odour

3. Health Hazard Data

Primary Route(s) of Entry: (In the Form of Dust and/or Fumes Only)

Inhalation? Yes

Skin? No

Ingestion? No

*UV Exposure

Carcinogenicity: NIF

Acute Effects of Overexposure:

EYES: Local Irritation

SKIN: Local Irritation

INHALATION: Excessive exposure to fume may cause a sweet or metallic taste in the mouth, immediate dryness and irritation of the throat, tightness of the chest, and coughing. Several hours later, symptoms may progress to fever, malaise, perspiration, frontal headache, muscle cramps, low back pain, occasionally blurred vision, nausea, and vomiting. Pulmonary congestion, shortness of breath and symptoms of oxygen deficiency may also develop.

INGESTION: Nausea, Vomiting, and Purging

EXPOSURE TO UV: Exposure to UV Radiation can result in keratoconjunctivitis, also known as welders flash. Symptoms include inflammation, blurred vision, and headache.

Chronic Effects of Exposure:

SKIN: Prolonged chronic or repeated skin contact with zinc dust or powder may cause a mild dermatitis.

Toxicity Data:

Job task data extrapolated over an eight hour TWA. Conditions for worst case scenarios. Zinc, total of 0.265 mg/m³ and Chromium, total of 0.0354 mg/m³

-Mild irritation: 300 ug/3 days. Intermittent skin contact

-Lowest toxic concentration: 124 mg/m³, 50 minute inhalation

Medical Conditions Aggravated by Exposure:

Respiratory illness/diseases, neurological and skin disorders/diseases.

Emergency and First Aid Procedures:

EYE CONTACT: Flush with running water, including under the eyelids, for about 15 minutes. If irritation persists, seek medical attention.

SKIN CONTACT: Contaminated shoes and clothing should be removed and the affected area washed with soap and water.

INHALATION: Remove victim from exposure area to fresh air immediately. If breathing has stopped, give artificial respiration. Keep the affected person warm and at rest. Seek medical attention immediately.

INGESTION: If victim is conscious dilute the stomach and induce vomiting. Qualified medical personnel should remove remaining chemicals by gastric lavage. Seek medical attention immediately.

4. Fire and Explosion Hazard Data

Flash Point (Method Used): NONE

Flammable Limits: N/A

LEL

UEL

Extinguishing MEDIA: N/A

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: Oil and grease on torches can cause a violent reaction in the presence of oxygen.

5. Reactivity Data

Stability: Unstable Conditions to Avoid: Allowing gases to be trapped in a confined area.
 Stable

Incompatibility (Materials to Avoid): Oil and grease on torch can cause a violent reaction in the presence of unburned oxygen.

Hazardous Decomposition or By-Products

Hazardous Polymerization: Will Occur Conditions to Avoid
 Will Not Occur

6. Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled: N/A

Waste Disposal Method: Comply with all local government regulations for proper disposal.

7. Special Protection Information

Respiratory Protection: Air purifying respirator if area is unventilated and local exhaust not available.

Ventilation: Local Exhaust - Use if in enclosed area
Mechanical
Other - Well ventilated area

Protective Gloves: Leather Gloves

Eye Protection: 4 - 5 minimum tinted glass recommended full face shield

Other Protective Equipment: Face shield, hard hat, leathers or fire retardant protective clothing, leather gloves

8. Special Precautions

Precautions to be Taken in Handling and Storing: Warning - Keep away from oil and grease.

Other Precautions: Other hazards can be created based on material being cut eg., vapours released from residue while cutting.

9. Other Information

Use proper procedure at all times as specified by the following:

1. Your company's Safe Practices Manual
2. COSHH Regulations 1999 and HSE current guideline notes EH40 (Occupational Exposure Limits)
3. EH54 (Assessment of exposure of fumes from all welding processes)
4. EH55 (the method of exposure to fumes from welding, brazing and similar processes)
5. Other applicable references

ABBREVIATIONS

NA - Not Applicable NE - Not Established
NL - Not Listed NIF - No Information Found

Disclaimer: This information is taken from sources or based upon data believed to be reliable. However, Cole Metal Products Ltd makes no warranty as to the correctness or sufficiency of any of the foregoing, or that additional or other measures may not be required under particular conditions.