

LTS Research Laboratories, Inc. Safety Data Sheet Cobalt Iron Tantalum

1. Product and Company Identification

Trade Name: Cobalt Iron Tantalum

Chemical Formula: CoFeTa

Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.

> Street: 37 Ramland Road City: Orangeburg State: New York 10962 Zip Code: Country: **USA**

855-587-2436 / 855-lts-chem Tel #:

24-Hour Emergency Contact: 800-424-9300 (US & Canada)

+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger



Hazard Statements:

H228: Flammable solid

H317: May cause an allergic skin reaction H319: Causes serious eye irritation H335: May cause respiratory irritation

H334: May cause allergy or asthma symptoms or breathing difficulties

if inhaled

Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces - No

P240 Ground/bond container and receiving equipment. P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P280: Wear protective gloves/protective clothing/eye protection/face

protection

P284: Wear respiratory protection

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do –

continue rinsing.

P342+P311: If experiencing respiratory symptoms: Call a POISON

CENTER or doctor/physician P405: Store locked up.

P501: Dispose of contents/container in accordance with

local/regional/national/international regulations.

HMIS Health Ratings (0-4):

Powder Bulk Health: 0 1 Flammability: 3 0 Physical: 1 0

3. Composition	
Chemical Family:	Alloy
Additional Names:	None
Cobalt (Co):	
Percentage:	0-100 wt%
CAS #:	7440-48-4
EC #:	231-158-0
Iron (Fe):	
Percentage:	0-100 wt%
CAS #:	7439-89-6
EC #:	231-096-4
Tantalum (Ta):	
Percentage:	100 wt%
CAS #:	7440-25-7
EC #:	231-135-5
	4. First Aid Procedures
General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Seek Medical Attention.
Skin:	Wash affected area with mild soap and water. Remove any
	contaminated clothing.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
	5. Firefighting Measures
Flammability:	Non-flammable, except as powder
Extinguishing Media:	Do not use water for metal fires – use CO ₂ , sand, extinguishing powder
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective
	clothing to prevent contact with skin and eyes. See section 10 for
	decomposition products.
	6. Accidental Release Measures
If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in
	special protection information. Isolate spill area and provide
	ventilation. Vacuum up spill using a high efficiency particulate
	absolute (HEPA) air filter and place in a closed container for disposal.
Environmental Precautions:	Take care not to raise dust.
Environmental riceatuons.	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions: Wash thoroughly after handling.

Storage Conditions: Store in a cool dry place in a tightly sealed container. Store apart from

materials and conditions listed in section 10.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before

eating and smoking. Do not blow dust off clothing or skin with

compressed air.

Ventilation: Provide sufficient ventilation to maintain concentration at or below

threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits: 0.1 mg/m³ as Co, long-term value

 5 mg/m^3 as Ta, long-term value

Threshold Limit Value: 0.02 mg/m³ as Co, long-term value

Special Equipment: None

Respiratory Protection:
Protective Gloves:

Dust Respirator
Rubber gloves

Eye Protection: Safety glasses or goggles

Body Protection: Protective work clothing. Wear close-toed shoes and long

sleeves/pants.

9. Physical and Chemical Characteristics

Color N/A

Form: Powder, Granules, Pellets, Sputtering target, Custom parts

Odor: N/A

Water Solubility:

Boiling Point:

N/A

N/A

N/A

Melting Point: N/A
Flash Point: N/A
N/A

Autoignition Temperature: N/A
Density: N/A
Molecular weight: N/A

10. Reactivity

Stability: Stable under recommended storage conditions

Reacts With: Acids, Oxidizing agents

Incompatible Conditions: Protect against electrostatic charges Hazardous Decomposition Products: Metal oxide fume, Iron oxides

11. Toxicological Information

Potential Health Effects:

Eyes: May causes serious eye irritation

Skin: May cause irritation
Ingestion: May cause irritation
Inhalation: May cause irritation

Chronic: N/A

Signs & Symptoms: May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

Aggravated Medical Conditions: N/A

Median Lethal Dose: N/A

Carcinogen: IARC-2B: Possibly carcinogenic to humans: limited evidence in human

in the absence of sufficient evidence in experimental animals.

ACGIH A3: Animal carcinogen: Agent is carcinogenic in experimental animals at a relatively high dose, by routes of administration, at sites, of histologic types, or by mechanisms not considered relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence suggests that the agent is not likely to cause cancer in humans except under uncommon

or unlikely routes or level of exposure.

12. Ecological Information

Aquatic Toxicity:

Persistent Bioaccumulation Toxicity: Very Persistent, Very Bioaccumulative:

Notes:

Low

No No

N/A

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous: Hazardous as powder only



Hazard Class: 4.1 Flammable solids

Packing Group: II UN Number: UN3089

Proper Shipping Name: Metal powder, flammable, n.o.s (Cobalt Iron Tantalum)

15. Regulatory Information

Sec 302 Extremely Hazardous:

No
Sec 304 Reportable Quantities:

N/A
Sec 313 Toxic Chemicals:

No

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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