

From: [Liang You](#)
To: [Lowman, Donald](#)
Cc: [Xu, Shirley](#)
Subject: [External_Sender] Re: REQUEST FOR ADDITIONAL INFORMATION
Date: Friday, December 07, 2018 11:36:25 AM

Hi, Don and Shirley,

Enclosed please find the files "Product_Container" and "Webpage_MSDS_Thoriated_Tungsten" to address your concerns in your previous message.

- For your first question, a file "Product_Container" is to provide the details of product labeling (front and back) of the product container. The container box has customer label, content label, radioactive material (2% Thoriated Tungsten) and ANSI/AWS/ISO compliance information/source on the front side. A text label on the box backside is to give safety warning related to product use including general welding operation as well as MSDS' url and warning of California Proposition 65.
- For your second question, we have implemented a webpage (<https://www.weldingcity.com/MSDS/>) with full MSDS information for Thoriated Tungsten electrode use with welding; the URL is provided to customers and workers in product labeling and website. A file named "Webpage_MSDS_Thoriated_Tungsten" is attached here to show the on-line MSDS first page. This pages will be also posted in our website under individual product listing.

Please let me know if you have any question in regard with our application.

Thank you very much for your kind consideration,

Best regards,

-Liang
CVI Tech

On Thu, Nov 29, 2018 at 4:08 PM Lowman, Donald <Donald.Lowman@nrc.gov> wrote:

Dear Mr. You:

This email is in response to your application, U.S. Nuclear Regulatory Commission (NRC) Form 313, dated August 20, 2018, requesting an exempt distribution license. We do not have sufficient information to complete the review of your application. Please provide responses to the information request below:

1. Per [10 CFR Part 40.52\(4\)](#), please provide "The proposed method of labeling or marking each unit, and/or its container with the identification of the manufacturer or initial transferor of the product and the source material in the product".

2. Per [10 CFR Part 40.52\(5\)](#), please detail "The means of providing radiation safety precautions and instructions relating to handling, use, and storage of products to be used under § 40.13(c)(1)(i) and (c)(1)(iii)". Currently, your application only states "MSDS sheet is available from our website and provided to our workers and customers".

We will continue our review upon receipt of this information. If we do not receive your reply within 30 calendar days from the date of this letter, we will consider your application as having been abandoned by you. This action would be without prejudice to the resubmission of another application with the required information. To expedite our review, you may scan your signed response documents and send it to my email address; Donald.Lowman@nrc.gov. Please mail the hard copy to:

Director, Office of Nuclear Material Safety & Safeguards

U.S. Nuclear Regulatory Commission

ATTENTION: Don Lowman

Mail Stop TWFN-5A10

11555 Rockville Pike

Rockville, MD 20852

Any correspondence regarding your amendment application should reference Mail Control Number 609882. If you have any questions, please feel free to contact me.

Don Lowman

Health Physicist

U.S. Nuclear Regulatory Commission

NMSS/MSST/MSLB

301.415.5452



Liang You, Ph.D.

Director, Business Development

liang.you@weldingcity.com

2870 North Berkeley Lake Rd. Ste 3

Duluth, GA 30096

www.WeldingCity.com

Phone: [770-609-8032](tel:770-609-8032)

FAX: [470-246-5710](tel:470-246-5710)

MATERIAL SAFETY DATA SHEET (MSDS)

Thoriated Tungsten Electrodes

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

Product identifier: Thoriated Tungsten Electrodes

Product use: Welding; Metal-working operations

Supplier name and address: CVI Technology, LLC, 2870 North Berkeley Lake Rd., Ste 3, Duluth GA 30096
Tel. 770.609.8032

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>LC₅₀(rat, inh)</u> <u>(mg/m³/4hr)</u>	<u>LD₅₀(mg/kg)</u> <u>rat, oral/dermal,</u> <u>rabbit</u>
Tungsten	7440-33-7	98-99	5mg/m ³ (Final Rule)	5mg/m ³	>5400	N/Av
Thorium Dioxide	1314-20-1	1-2	N/Av	N/Av	N/Av	N/Av

SECTION 3 — HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Gray metal solid. No odor.

Caution! May cause mild eye or skin irritation. Fumes may cause irritation of the respiratory tract.
Contains material that may cause cancer.

POTENTIAL HEALTH EFFECT

Target organs: Eyes, skin, respiratory system, gastrointestinal system, blood, liver, kidneys.

Signs and symptoms of short-term (acute) exposure:

- *Inhalation:* Overexposure to cutting and welding fumes may result in mild irritation, cough, sore throat and wheezing. Thorium dioxide is a naturally occurring radioactive element. It is an alpha emitter and, as such, its primary hazard lies in inhalation of dust or fumes. Normal handling of these electrodes are not expected to result in any significant external radiation exposure.
- *Skin contact:* Adverse skin reactions from contact with electrodes are unlikely. Burns may occur from touching hot metal. Radioactive alpha particles normally cannot penetrate the upper layers of skin tissue.
- *Eye contact:* Fumes and/or gases produced during cutting or welding may cause mild irritation.
- *Ingestion:* No health effects expected from small amounts. Large amounts may cause gastrointestinal discomfort.

Effects of long-term (chronic) exposure: Contains Thorium dioxide, which may cause blood system, liver or kidney damage. Prolonged or repeated skin contact may cause drying and cracking of the skin (dermatitis).

Other important hazards: Contains material that may cause cancer. See TOXICOLOGICAL INFORMATION, Section 11.

SECTION 4 — FIRST AID MEASURES

Inhalation: If breathing difficulties occur, remove victim to fresh air and obtain medical attention immediately.

Skin contact: Wash skin thoroughly with mild soap and running water. Obtain medical attention if irritation develops. Launder clothing before reuse. Seek medical attention for burns resulting from the cutting or welding process.

Eye contact: Immediately flush eyes with gently running water for at least 15 minutes. Obtain medical attention if pain or irritation persists.

Ingestion: Contact a physician or Poison Control Centre. DO NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person.

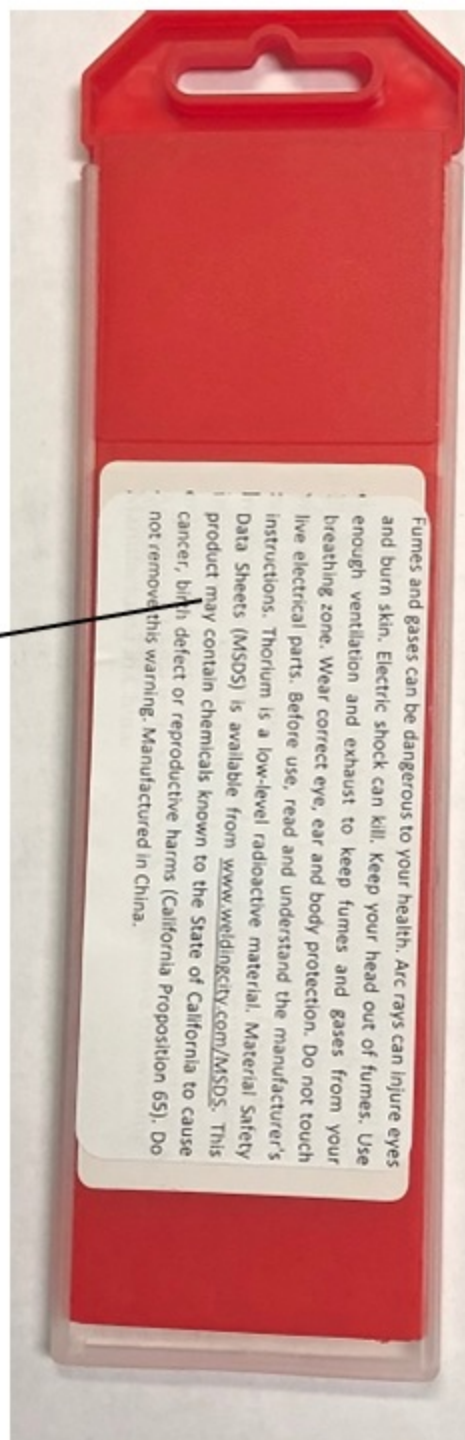


Red color box to comply with AWS spec for 2.0% Thorium Tungsten electrodes (Color code: Red).

Box backside to give safety warning related to product use including general welding operation as well as MSDS' url and warning of California Proposition 65

Source material and content labeled

ANSI, AWS and ISO compliance information and resources



Fumes and gases can be dangerous to your health. Arc rays can injure eyes and burn skin. Electric shock can kill. Keep your head out of fumes. Use enough ventilation and exhaust to keep fumes and gases from your breathing zone. Wear correct eye, ear and body protection. Do not touch live electrical parts. Before use, read and understand the manufacturer's instructions. Thorium is a low-level radioactive material. Material Safety Data Sheets (MSDS) is available from www.weldingcity.com/MSDS. This product may contain chemicals known to the State of California to cause cancer, birth defect or reproductive harms (California Proposition 65). Do not remove this warning. Manufactured in China.