

## Material Safety Data Sheet

### Filler Metals and Welding Rods

#### 2% Thoriated

Product Trade Name/Product Classification(s): 2% THORIATED TUNGSTEN ELECTRODES

"ESSENTIALLY SIMILAR" to U.S. Department of Labor Form OSHA 20 (to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200)

<b>SECTION 1: Identification</b> GTS, INC. 5275 Tilghman Street Allentown, PA 18104 398-2211 Product Trade Name/Product Classification(s): 2% THORIATED TUNGSTEN ELECTRODES	<b>SECTION 2: Hazardous Ingredients/Identify Info.</b> INFORMATION: THIS SECTION COVERS MATERIALS FROM WHICH THIS PRODUCT IS MANUFACTURED. BASE METAL: TUNGSTEN 98% OTHERS: THORIUM 2%
<b>SECTION 3: Physical Properties</b> Boiling Point: 5900 °C Specific Gravity: 19.3 gm/cc Vapor Pressure (mm Hg): @ 1527 °C 1.93 X 10 <sup>15</sup> Percent Volatile by Volume (%): NA Evaporation Rate: NA Vapor Density: (Air=1): NA Appearance and Odor: Bare rods all sizes and shapes: Silver/gray color	<b>SECTION 4: Fire and Explosion Hazard Data</b> <ul style="list-style-type: none"> <li>Flash Point: NA</li> <li>Extinguishable Media: Will not burn, use water to cool</li> <li>Special Fire Fighting Procedures: None currently known</li> <li>Unusual Fire and Explosion Hazards: None currently known</li> </ul>
<b>SECTION 5: Health Hazard Data</b> Effects of Overexposure and Emergency and First Aid Procedures: Electric shock and burns. Deactivate power. Administer CPR as required. Cover burns with sterile dressing. Call a physician. Radiation Energy can produce "flash" burns of eyes and skin. See a physician. Gases, fumes, and dust overexposure can cause personal injury. Symptoms will vary according to the process and its application. Refer to special instruction in Section 9. Noise overexposure can damage hearing. Wear hearing protection.	<b>SECTION 6: Reactivity Data</b> Stability: Stable Conditions to Avoid: Elevated temperatures in an oxidizing environment Hazardous Polymerization: None currently known
<b>SECTION 8: Special Protection Information</b> <ul style="list-style-type: none"> <li>Respiratory Protection: Depends on use, condition, and location. Use adequate ventilation or personal respiratory protection.</li> <li>Ventilation: Local ventilation recommended. See OSHA 29CFR1910.252 &amp; ANSI Z49.1. In confined areas local exhaust is essential. See ANSI Z49.1 for mechanical ventilation.</li> <li>Protective Gloves: Welding gloves recommended.</li> <li>Eye Protection: Safety spectacles or goggles.</li> <li>Other Protective Equipment: See ANSI Z49.1. Welding helmet, flame retardant clothing recommended. See AWS C5.1.</li> </ul>	<b>SECTION 7: Spill or Leak Procedures</b> Waste Disposal Method: Normal, environmentally acceptable. Industries waste disposal, land fill, burial, etc.
<b>SECTION 9: Special Precautions</b> Arcs and sparks during use could be the source of ignition of combustible materials. Arc fumes: The composition and quantity are dependent on the alloy, electrode, number of operators, arc ventilation present, and the relationship of the alloy, electrode, number of operators, arc time, ventilation present, and the relationship of operators head with respect to the fume plume, all affect the level of contaminants. See OSHA CFR1910.252 & ANSWZ49.1 & AWSF1.1.	<b>SECTION 10: DISCLAIMER</b> ALTHOUGH REASONABLE CARE HAS BEEN TAKEN IN THE PREPARATION OF THE INFORMATION HEREIN, INWELD EXTENDS NO WARRANTIES, EXPRESS OR IMPLIED, MAKES NO REPRESENTATIONS AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION FOR CONSEQUENCES OF ITS USE. JUDGMENTS AS TO THE SUITABILITY OF INFORMATION FOR PURCHASER'S PURPOSES ARE PURCHASER'S RESPONSIBILITY.

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