

**Material Safety Data Sheet**  
**Filler Metals and Welding Rods**

Product Trade Name/Product Classification(s): **CERIATED 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)

<p align="center"><b>SECTION 1: Identification</b></p> <p><b>SUPPLIER:</b> Inweld Corporation <b>Phone:</b> 1-800-346-5368 <b>Revised:</b> May 2005 <b>Address:</b> 3962 Portland St., Coplay, PA 18037</p> <p align="center">Product Trade Name/Product Classification(s): <b>CERIATED TUNGSTEN ELECTRODES</b></p>	<p><b>SECTION 2: Hazardous Ingredients/Identity Info.</b></p> <p>IMPORTANT: THIS SECTION COVERS MATERIALS FROM WHICH THIS PRODUCT IS MANUFACTURED.</p> <p><b>BASE METAL:</b> <u>TUNGSTEN 98%</u> <b>OTHERS:</b> <u>CERIUM 2% MAX.</u></p> <p>Hazardous mixtures of other liquids, solids, or gases. Ceria belongs to the rare earth and shows no toxicity or other negative effects on the human body.</p>
<p><b>SECTION 3: Physical Properties</b></p> <p>Boiling Point: 8660° C    Specific Gravity: <u>19.3 M/OM<sup>3</sup></u> Vapor Pressure (mm Hg): <u>N/A</u> Percent Volatile by Volume (%): <u>N/A</u> Evaporation Rate: <u>N/A</u>    Vapor Density: (AIR=1): <u>N/A</u> Appearance and Odor: <u>Gray metallic surface, no odor</u> Solubility in Water: <u>Insoluble</u> Comments: <u>This material has a very high density. Powder/dusts will settle quickly.</u></p>	<p><b>SECTION 4: Fire and Explosion Hazard Data</b></p> <ul style="list-style-type: none"> <li>Flash Point: <u>None</u></li> <li>Extinguishable Media: <u>Dry chemical, sand, or limestone</u></li> <li>Flammable limits: <u>N/A</u></li> <li>Comments: <u>Ceriated tungsten powder/dust (i.e. grinding dust) may be a weak fire and explosion hazard depending on particle size and dispersion in air.</u></li> </ul>
<p><b>SECTION 5: Health Hazard Data</b></p> <p><u>Effects of Overexposure and Emergency and First Aid Procedures:</u></p> <p>Reference available at this time do report ill health effects as a result of exposure to tungsten. If a person breathes in large amounts of dust, remove from exposure. If material gets in eyes, flush particles from eyes with water. Consult a physician.</p>	<p><b>SECTION 6: Reactivity Data</b></p> <p>Stability: <u>Stable</u>                      Incompatibility: <u>None known</u> Hazardous Decomposition Product: <u>Vapor at high temperature</u> Hazardous Polymerization: <u>Will not occur</u></p>
<p><b>SECTION 8: Special Protection Information</b></p> <ul style="list-style-type: none"> <li><u>Respiratory Protection:</u> Use respirators during grinding.</li> <li><u>Ventilation:</u> Local exhaust.</li> <li><u>Protective Gloves:</u> Necessary to handle tungsten only while welding.</li> <li><u>Eye Protection:</u> Dark safety spectacles or goggles while welding.</li> <li><u>Other Protective Equipment:</u> Not necessary.</li> </ul>	<p><b>SECTION 7: Spill or Leak Procedures</b></p> <p>Waste Disposal Method: <u>Dispose of: in accordance with Federal, State, and Local laws and regulations.</u> Steps to be taken in case material is spilled or released: <u>Provide clean-up employees with respirators for dusty conditions (Grinding dust).</u></p>
<p><b>SECTION 9: Special Precautions</b></p> <p><u>Precautions to be taken in handling and storing:</u></p> <p align="center">None needed.</p>	<p><b>SECTION 10: DISCLAIMER</b></p> <p>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 AS TO THE ACCURACY OR SUITABILITY OF INFORMATION FOR APPLICATION TO PURCHASER'S INTENDED PURPOSE OR FOR CONSEQUENCES OF ITS USE. JUDGMENTS AS TO THE SUITABILITY OF INFORMATION FOR PURCHASER'S PURPOSES ARE PURCHASER'S RESPONSIBILITY.</p>