

**Section 1 Identification**

**Product Name:** Machined Electrodes – Viper, HyperTIG, PT400  
**Part Numbers:** 71-1007, HT103, HT203, 1007-60-LA, 1007-60-S-LA  
**Recommended Use:** Plasma Welding Electrode, TIG Welding Electrode  
**Manufacturer:** Camarc LLC, 39048 Webb Drive, Westland, M, 48185, USA  
**General Information:** [office@camarcwelding.us](mailto:office@camarcwelding.us)  
**Emergency:** 313 727 5020

**Section 2 Hazard(s) Identification**

During normal operation and usage, this non-combustible, non-reactive, solid material article does not present inhalation, ingestion, or chemical hazards. Pre-machined Welding Electrodes that this SDS concerns will require periodic maintenance or replacement, during which exposure to adhered hazardous contamination is possible. When this article is machined or otherwise modified by the user, dusts or fumes may be created, which may be potentially hazardous.

**WARNING**

Electric Shocks Can Kill	Arc Rays Can Injure and Burn Eyes and Skin
Fumes May be Harmful If Inhaled	Keep Out of Reach of Children

**Section 3 Composition / Information on Ingredients****1.5% Lanthanated Tungsten – EWG**

<b>Tungsten</b>	≥97.8%			
<b>Lanthanum Oxide</b>	1.3 – 1.7% (typically)			
<b>Impurities</b>	≤0.1%			
<b>Designations</b>	ISO 6848	AWS A5.12	WL15	EWLa-1.5

<b>Exposure Limit</b>	
ACGIH TWA	5 mg/m <sup>3</sup> (fume)
OSHA PEL TWA	No Data Available

**Section 4 First Aid Measures**

**Show this SDS to those administering medical attention or treatment.**

**Inhalation:** If breathing has stopped, perform artificial respiration and obtain medical aid immediately. If breathing is difficult, provide fresh air and seek medical attention as soon as possible.

**Skin:** Cuts or abrasions should be treated promptly with thorough cleansing of the affected area. Wash the skin using soap or mild detergent and water. Get medical attention if irritation develops and persists.

**Eyes:** Eye injuries from solid particles should receive immediate medical attention. Dust may be flushed from eyes immediately with large amounts of water, lifting the lower and upper lids occasionally; seek medical attention.

**Ingestion:** If the product or dust is swallowed, seek immediate medical attention or advice. Do not induce vomiting

## Section 5 Fire-Fighting Measures

### Suitable Extinguishing Media:

This solid material is noncombustible. Use extinguishing media appropriate to the surrounding fire.

### Special Fire Fighting Procedures:

Not applicable

### Unusual Fire and Explosion Hazard:

A fire or explosion hazard is not likely but, is possible if dusts generated by grinding are present in certain combinations of particle size, dispersion, concentration, and strong ignition source.

### Hazardous Combustion Products:

Temperatures above the melting point may release alloy elements and metal oxides.

### Special Protective Equipment and Precautions for Fire-Fighters:

For a dust fire confined to a small area, use a respirator approved for toxic dusts and fumes. Do not use water to extinguish fires around operations involving molten metal due to the potential for steam explosions.

## Section 6 Accidental Release Measures

### Clean-Up Procedures:

Product in solid form may be picked up by hand or other means to be placed into a container. When cleaning dust, use methods that minimize the dispersion of dust such as a high efficiency particulate air (HEPA) vacuum, wet dust mop, or wet clean-up. Put recovered material in a suitable, covered, and labeled container.

### Personal Precautions, Protective Equipment and Emergency Procedures:

Refer to Section 8.

### Environmental Precautions:

Refer to Section 12.

## Section 7 Handling and Storage

### Safe Handling Procedures:

No special safety precautions required for handling prior to installation. Installation and removal of the product may cause exposure to dusts and other materials or chemicals associated with the installation (work) environment. Operations such as grinding, cutting, burning, and welding may generate dusts or fumes which may require special handling procedures.

### Hygienic Practices:

Wash hands thoroughly after handling, and before eating or smoking. Smoking and consumption of food or beverages should be restricted from areas where hazardous dust or chemical may be present. Do not shake clothing, rags, or other items to remove dust. Dust should be removed by laundering or vacuuming (with appropriate filters) the clothing, rags, or other items.

### Conditions for Safe Storage:

Maintain good housekeeping to prevent accidental exposure to substances that could impair the quality of the product.

## Section 8 Exposure Control and Personal Protection

### Control parameters:

Refer to table in Section 3 for occupational exposure limit values.

### Appropriate Engineering Controls:

When machining, heating or melting, use adequate local (preferably) or general exhaust ventilation to ensure that concentrations of dusts or fumes do not exceed exposure standards. Keep workplace clean and dry (unless wet machining is being used to capture dust and fume). Train personnel to minimize exposure to hazards during installation and replacement of product. On a regular basis, verify condition and proper function of equipment in which the product will be installed.

### Individual Protection Measures:

Use appropriate gloves to protect against physical hazards. Always wear safety glasses with side shields and appropriate hearing protection when grinding or cutting. Use an approved respirator, with the proper assigned protection factor, whenever airborne concentrations of hazardous components exceed exposure limits listed in Section 3. Workers should wash before meals and leaving work.

## Section 9 Physical and Chemical Properties

<b>Appearance:</b>	Machined Metallic solid with a Silver Grey color
<b>Odor:</b>	None
<b>Melting point:</b>	~3,400 °C (6,152 °F)
<b>Flash Point:</b>	Not Available
<b>Boiling point and range:</b>	~ 5,900 °C (10,652 °F)

Page : 4  
SDS No. SDS - Electrodes Machined  
Rev:  
Date: 9/14/2022

**Evaporation Rate:** Not Volatile  
**Flammability:** Not Flammable  
**Vapor Density:** Not Volatile  
**Density / Specific Gravity:** 19.3 (approx.)  
**Vapor Pressure:** N/A  
**Solubility In Water:** Insoluble

*(Note – These are typical values and not an exact Specification).*

## Section 10 Stability and Reactivity

### Chemical Stability:

Stable under normal use conditions

### Possibility of Hazardous Reactions:

None under normal conditions

### Incompatible materials:

Strong acids. Incompatible with oxidizing agents.

### Hazardous Decomposition Products:

Fumes and gasses produced by welding, brazing and similar processes cannot be classified simply. The composition and quantity of both are dependent upon the metal being welded, the process, the procedures and the filler metal being used. Other conditions which also influence the composition and quantity of fumes and gases to which the worker may be exposed include: coatings on the metal being welded, the number of welders and the volume of the work space, the quality and amount of ventilation used, the position of the welder's head in relation to the fume plume, as well as the presence of contaminants in the atmosphere when the filler metal is consumed. The fume and gas decomposition products generated are different in percent and form the product ingredients listed in Section III. The products formed in normal operation include those originating from the volatilization, reaction and oxidation of the filler metal, the metal being welded, the coatings, etc. as noted above. One recommended way to determine the composition and quality of fumes and gases to which workers are exposed is to take an air sample inside the welder's helmet, if worn, or in the workers breathing zone. See ANSI / AWS F1.1 "Method For Sampling Airborne Particles Generated By Welding And Allied Processes" available from the American Welding Society, P.O. Box 35140, Miami, FL 33135

## Section 11 Toxicology Information

### Effects of Overexposure

Inhalation of welding fumes and gases can be dangerous to your health. Short-term (acute) overexposure to welding fumes may result in discomfort such as dizziness, nausea, or dryness or irritation of nose, throat, or eyes. Although the inhalation of Tungsten has the potential for causing transient or permanent lung damage, it is generally considered to exhibit a low degree of toxicity.

Normal handling of these electrodes is not expected to result in any significant radiation exposure. Considerable experience in refining and use of thorium has not revealed any adverse effects from industrial exposure. Long-term (chronic) over-exposure to welding fumes can lead to Siderosis (iron deposits in lung) and is believed to affect pulmonary function.

**Section 12 Ecological Information**

Copper Alloys are relatively insoluble in water and therefore have a low bioavailability. Product is not expected to present an environmental hazard. Dusts and fumes should not be released into the environment.

**Section 13 Disposal Considerations**

Used Product should be treated as scrap tungsten whenever possible and may be treated as General Industrial Waste as permitted by Federal, State and Local Disposal Regulations.

**Section 14 Transportation Information**

**UN number:** Not applicable  
**UN proper shipping name:** Not applicable  
**Transport hazard class(es):** Not applicable  
**Packing group number:** Not applicable  
**Environmental hazards:** Not applicable  
**IMDG Code:** Not applicable  
**Transport in bulk:** Not applicable  
**Special precautions:** No special requirements are necessary in transporting this product

**Section 15 Regulatory Information**

This product is not classified as a health or environmental hazard under current legislation. No obligation exists to issue a safety data sheet according to REACH Art. 31.

Hazardous Material Identification System

<b>Health Hazard</b>	0
<b>Flammability Hazard</b>	0
<b>Reactivity Hazard</b>	0
<b>Maximum Personal Protection</b>	A

**Section 16 Other Information**

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