

TELEDYNE WAH CHANG HUNTSVILLE -- TUNGSTEN WELDING ELECTRODES -- 3439-00-105-9945

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Product Identification  
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Product ID:TUNGSTEN WELDING ELECTRODES

MSDS Date:03/01/1992

FSC:3439

NIIN:00-105-9945

MSDS Number: BCYVH

=== Responsible Party ===

Company Name:TELEDYNE WAH CHANG HUNTSVILLE

Address:7300 HIGHWAY 20 WEST

City:HUNTSVILLE

State:AL

ZIP:35806

Country:US

Info Phone Num:205-837-1311

Emerge

ncy Phone Num:205-837-0285

CAGE:3G120

=== Contractor Identification ===

Company Name:TELEDYNE WAH CHANG

Address:7300 HIGHWAY 20 WEST

Box:City:HUNTSVILLE

State:AL

ZIP:35806-2052

Country:US

Phone:205-837-0285

CAGE:3G120

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Composition/Information on Ingredients  
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Ingred Name:TUNGSTEN,AS W,SOLUBLE COMPOUNDS.

CAS:7440-33-7

RTECS #:YO7175000

Fraction by Wt: 97.7%

Other REC Limits:NONE SPECIFIED

OSHA PEL:NOE ESTABLISHED

ACGIH TLV:1 MG/M3/3 STEL; 9495

Ingred Name:THORIUM DIO

XIDE (SARA 313)  
CAS:1314-20-1  
RTECS #:XO6950000  
Fraction by Wt: 2.2%  
Other REC Limits:NONE RECOMMEDED

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===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:TARGET ORGANS:EYES, SKIN, RESPIRATORY TRACT. ACUTE- DUST MAY IRRITATE EYE, SKIN & RESPIRATORY TRACT. FUMES FROM WELDING MAY CAUSE IRRITATION. WELDING ARC LIGHT MAY DAMAGE EYES & SKIN. ELECTRIC SHOCK C AN KILL. CHRONIC- DUST/FUMES MAY CAUSE LUNG CANCER.  
Explanation of Carcinogenicity:NTP LISTS THORIUM AS A KNOWN CARCINOGEN, PER MSDS.  
Effects of Overexposure:CHILLS, FEVER, COUGHING, SNEEZING, WHEEZING; REDNESS, ITCHING, EYE DAMAGE; REDNESS, ITCHING OF SKIN  
Medical Cond Aggravated by Exposure:CHRONIC RESPIRATORY DISEASES AND ASTHMA MAY BE AGGRAVATED BY EXPOSURE TO DUST, FUME, OR MISTS.

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===== First Aid Measures =====

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First Aid:GET MEDICAL HELP IF SYMPTOMS PERSIST. INHALED:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED. EYES:FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. SKIN:WASH WITH SOAP & WATER. ORAL:SEEK MEDI CAL ATTENTION.

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===== Fire Fighting Measures =====

Flash Point:NOT RELEVANT  
Extinguishing Media:USE EXTINGUISHING MEDIA FOR SURROUNDING FIRE. FOR TUNGSTEN DUST FIRES, USE CLASS D EXTINGUISHING MEDIA, DRY POWDERS.  
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHES.  
Unusual Fire/Explosion Hazard:WHEN TUNGSTEN IS HEATED IN AIR, TUNGSTEN TRIOXIDE BEGINS TO SUBLIME ABOVE 1382F (750C).

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===== Accidental Release Measures =====

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUE AND PLACE IN SUITABLE DOT APPROVED DISPOSAL CONTAINER. TUNGSTEN SCRAP AND DUST HAVE VALUE AND CAN BE RECLAIMED.  
Neutralizing Agent:NOT RELEVANT

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Handling and Storage  
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Handling and Storage Precautions: MAINTAIN GOOD HOUSEKEEPING PROCEDURES TO PREVENT DUST ACCUMULATION FROM GRINDING, ETC.

Other Precautions: FOLLOW ALL PROCEDURES IN ANSI Z49.1 AND OSHA 29 CFR 1910. PERIODIC MEDICAL EXAMS ARE RECOMMENDED FOR INDIVIDUALS REGULARLY EXPOSED TO DUST OR FUME.

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Exposure Controls/Personal Protection  
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Respiratory Protection: USE NIOSH APPROVED RESPIRATOR WITH HEPA CARTRIDGE

OR SUPPLIED AIR RESPIRATOR. IF RESPIRATOR USED, A PROGRAM IN ACCORDANCE WITH 29 CFR 1910.134 MUST BE IMPLEMENTED. CONFINED SPACES REQUIRE SPECIAL ATTENTION TO PROVIDE ADEQUATE VENTILATION.

Ventilation: USE GENERAL & LOCAL EXHAUST AT FLAME TO KEEP FUMES AND GASES BELOW TLV'S IN THE WORKER'S BREATHING ZONE & GENERAL AREA.

Protective Gloves: WELDER'S GLOVES

Eye Protection: FACE SHIELD WITH FILTER LENS.

Other Protective Equipment: WEAR FLAME RETARDANT CLOTHES MAKING SURE SKIN NOT EXPOSED.

Work Hygienic Practices: WASH HANDS AFTER USE AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDRY CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

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Physical/Chemical Properties  
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HCC: T7

NRC/State Lic Num: NOT RELEVANT

Boiling Pt: B.P. Text: 10652F, 5900

Melt/Freeze Pt: M.P/F.P Text: 6152F, 3400C

Spec Gravity: 19

Evaporation Rate & Reference: NOT RELEVANT

Solubility in Water: INSOLUBLE

Appearance and Odor: TIN-WHITE METAL. NO ODOR.

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Stability and Reactivity Data  
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Stability Indicator/Materials to Avoid: YES

STRONG OXIDIZING AGENTS, STRONG ACIDS, BROMINE TRIFLUORINE, FLUORINE, IODINE PENTAFLUORIDE AND MIXING LEAD OXIDE+(DUST)

Stability Condition to Avoid: ALLOYS ARE CHEMICALLY STABLE. THORIUM DECAYS BY RADIOACTIVITY.

Hazardous Decomposition Products: NONE

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Disposal Considerations  
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Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND

## FEDERAL REGULATIONS

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