

TELEDYNE WAH CHANG -- TUNGSTEN WELDING ELECTRODES (2% THORIATED) --  
3439-00-872-1411

===== Product Identification =====

Product ID:TUNGSTEN WELDING ELECTRODES (2% THORIATED)

MSDS Date:11/01/1985

FSC:3439

NIIN:00-872-1411

MSDS Number: BFTJG

=== Responsible Party ===

Company Name:TELEDYNE WAH CHANG

Address:7300 HIGHWAY 20 WEST

City:HUNTSVILLE

State:AL

ZIP:35806-2052

Country:US

Info Phone Num:205-837

-1311

Emergency Phone Num:205-837-0285

CAGE:3G120

=== Contractor Identification ===

Company Name:INDUSTRO-WEL, INC.

Address:4225 PHIL NIEKRO PARKWAY SUITE 115

Box:City:NORCROSS

State:GA

ZIP:30093

Country:US

Phone:404-564-0630

CAGE:3N725

Company Name:L AND M WELDING SUPPLY INC

Address:568 WESTERN DR

Box:City:MOBILE

State:AL

ZIP:36607-1420

Country:US

Phone:334-470-9997

CAGE:1HJ95

Company Name:TELEDYNE WAH CHANG

Address:7300 HIGHWAY 20 WEST

Box:City:HUNTSVILLE

State:AL

ZIP:35806-2052

Country:US

Ph

one:205-837-0285  
CAGE:3G120

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Composition/Information on Ingredients  
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Ingred Name:TUNGSTEN  
CAS:7440-33-7  
RTECS #:YO7175000  
Fraction by Wt: >97.7%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:5 MG/M3/ 10 STEL  
ACGIH TLV:5 MG/M3/10 STEL;9192

Ingred Name:THORIUM DIOXIDE (SARA III)  
CAS:1314-20-1  
RTECS #:XO6950000  
Fraction by Wt: 2.2%  
Other REC Limits:NONE SPECIFIED

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Hazards Identification  
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Routes of Entry: Inhalation:YES Skin:YE  
S Ingestion:YES  
Reports of Carcinogenicity:NTP:YES IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ALL HAZARDS OCCUR FROM DUST, FUMES OR  
MISTS. INHALATION: MAY CAUSE LUNG DAMAGE OR IRRITATION. THE LIGHT  
FROM THE ARC CAN CAUSE EYE DAMAGE, INFLAMMATION OF THE MUSOUS  
MEMBRANE AND SKIN DAMAGE.  
Explanation of Carcinogenicity:NTP STATES THERE IS SUFFICIENT EVIDENCE  
FOR THE CARCINOGENICITY OF THORIUM DIOXIDE IN HUMANS.  
Effects of Overexposure:EYE:DMG,INFAMM;SKIN:IRR;INH:TRANSIEN/P  
ERMAN  
LUNG DMG;TOX RADIOLOG;ELECTR SHOCK KILLS;RISK LUNG CANCR  
Medical Cond Aggravated by Exposure:CHRONIC RESPIRATORY DISEASES AND  
ASTHMA MAY BE AGGRAVAED BY EXPOSURE TO DUST, FUME OR MISTS.

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First Aid Measures  
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First Aid:SKIN AND EYES: WASH SKIN WITH SOAP AND WATER. WASH EYES WITH  
LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION  
OCCURS, SEEK MEDICAL ATTENTION. INHALATION: REMOVE FROM EXPOSURE.  
SEEK MEDICA L ATTE

NTION. IF NECESSARY AID BREATHING. INGESTION:  
SEEK MEDICAL ATTENTION.

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

Extinguishing Media:FOR THE SURROUNDING FIRE. FOR TUNGSTEN DUST FIRES  
USE CLASS D EXTINGUISHING MEDIA, DRY POWDERS.

Fire Fighting Procedures:FOR A TUNGSTEN DUST FIRE CONFINED TO A SMALL  
AREA, USE A RESPIRATOR APPROVED FOR TOXIC DUSTS AND FUMES. FOR  
LARGE FIRE, FIREFIGHTERS SHOULD USE SCBA.

Unusual Fire/Explosion Hazard:WHEN TUNGSTEN IS HEATE  
D IN AIR, TUNGSTEN  
TRIOXIDE BEGINS TO SUBLIME ABOVE 750 C.

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

Spill Release Procedures:SWEEP UP AND PLACE IN PROPER CONTAINER.  
TUNGSTEN SCRAP AND DUST HAVE VALUE AND CAN BE RECLAIMED.

Neutralizing Agent:NOT APPLICABLE.

===== Handling and Storage =====

Handling and Storage Precautions:MAINTAIN GOOD HOUSEKEEPING TO PREVENT  
DUST ACCUMULATION.

Other Precautions:PERIODIC MED EXAMS RECOM  
MENDED FOR INDIVIDUALS

REGULARLY EXPOSED TO DUST/FUME/TRAIN WELDER TO KEEP HIS HEAD OUT OF  
THE FUMES.MONITOR AIR TO ENSURE ACCEPTABLE EXPOSURES.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NIOSH APPVD RESP IAW 29CFR 1910.134

Ventilation:LOCAL EXHAUST TO MAINTN BELOW TLV.

Protective Gloves:WELDER'S GLOVES

Eye Protection:FACE PROTECT W/WLDG LENS.

Other Protective Equipment:WHEN WELDING USE FLAME RETARDANT CLOTH.

Work Hygienic Practices:OBSER

VE GOOD PERSONAL HYGIENE PRACTICES AND

RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR  
FOOTWEAR.

Supplemental Safety and Health

NONE

===== Physical/Chemical Properties =====

HCC:N1

Boiling Pt:B.P. Text:32.0F,0.0C

Melt/Freeze Pt:M.P/F.P Text:32.0F,0.0C

Spec Gravity:19.

Solubility in Water:INSOLUBLE

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

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Av

oid:YES

STRONG ACIDS, BROMINE TRIFLUORIDE, FLUORINE, IODINE PENTAFLUORIDE, AND MIXING LEAD OXIDE WITH TUNGSTEN DUST.

Stability Condition to Avoid:OXIDIZERS AT ELEVATED TEMPERATURES.

Hazardous Decomposition Products:NONE

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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