

TELEDYNE WAH CHANG HUNTSVILLE -- TUNGSTEN WELDING ELECTRODES -- 3439-00-872-1411

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

Product ID:TUNGSTEN WELDING ELECTRODES

MSDS Date:03/01/1991

FSC:3439

NIIN:00-872-1411

MSDS Number: BKJQX

=== Responsible Party ===

Company Name:TELEDYNE WAH CHANG HUNTSVILLE

Address:7300 HIGHWAY 20 WEST

City:HUNTSVILLE

State:AL

ZIP:35806-2052

Country:US

Info Phone Num:205-837-1311

Em

ergency Phone Num:205-837-0285

CAGE:3G120

=== Contractor Identification ===

Company Name:INWELD MFG CORP

Address:3962 PORTLAND ST

Box:40

City:COPLAY

State:PA

ZIP:18037-0040

Country:US

Phone:610-261-1900

CAGE:66376

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

=====  
Composition/Information on Ingredients  
=====

Ingred Name:TUNGSTEN

CAS:7440-33-7

RTECS #:YO7175000

Other REC Limits

:NONE SPECIFIED  
OSHA PEL:5 MG/M3/ 10 STEL  
ACGIH TLV:5 MG/M3/10 STEL;9192

Ingred Name:ZIRCONIUM OXIDE  
CAS:1314-23-4  
RTECS #:ZH8800000  
Other REC Limits:NONE SPECIFIED

Ingred Name:THORIUM OXIDE  
CAS:1314-20-1  
Other REC Limits:NONE SPECIFIED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES  
Health Hazards Acute and Chronic:INHALATION OF TUNGSTEN  
DUSTS,FUMES/MIST

S MAY CAUSE TRANSIENT/PERMANENT LUNG DAMAGE &  
IRRITATES SKIN.THORIUM IS TOXIC RADIOLOGICALLY,BUT HAS LOW CHEMICAL  
TOXICITY.THE LIGHT FROM THE ARC CAN CAUSE EYE/S KIN DAMAGE & CAN  
DECOMPOSE CHLORINATED HYDROCARBON TO TOXIC GASES SUCH AS  
PHOSGENE.CHRONIC-NOT GIVEN

Explanation of Carcinogenicity:THORIUM OXIDE

Effects of Overexposure:ELECTRIC ARC WELDING MAY CREATE FUMES AND GASES  
THAT CAN BE DANGEROUS TO YOUR HEALTH.ARC RAYS CAN INJURE EYES AND  
BURN SKIN. ELECTRIC SHOCK CAN  
KILL.

Medical Cond Aggravated by Exposure:CHRONIC RESPIRATORY DISEASES AND  
ASTHMA MAY BE AGGRAVATED BY EXPOSURE TO DUST, FUMES, OR MISTS.

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

First Aid:CALL FOR MEDICAL AID.INHALATION:REMOVE TO FRESH AIR.GIVE  
CPR/OXYGEN IF NEEDED.EYE:FLUSH WITH WATER FOR 15 MINUTES.SKIN:WASH  
WITH SOAP & WATER.CLEAN WOUND CONTAMINATED WITH DUST/FUME/MIST  
IMMEDIATELY.I NGESTION:SEEK MEDICAL ATTENTION. IN CASE OF  
ELECTRICAL SHOCK  
,TURN OFF POWER & FOLLOW RECOMMENDED TREATMENT.

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

Flash Point:NON FLAMMABLE  
Extinguishing Media:MEDIA APPROPRIATE FOR SURROUNDING FIRE. FOR  
TUNGSTEN DUST FIRES USE CLASS D EXTINGUISHING MEDIA, DRY POWDERS.  
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA &  
FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER  
SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.  
Unusual Fire/Explosion Haza

rd:WELDING ARC AND SPARKS CAN IGNITE  
COMBUSTIBLES.TUNGSTEN DUST (FROM GRINDING) MAY PRESENT A MODERATE  
FIRE HAZARD IF ALLOWED TO ACCUMULATE.TUNGSTEN TRIOXIDE.

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

Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:STORE IN A DRY PLACE.  
Other Precautions:READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTIONS  
AND THE PRECAUTIONARY LABEL O  
N THE PRODUCT.

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

Respiratory Protection:NONE REQUIRED FOR ELECTRODES AS  
RECEIVED.REQUIRED DURING GRINDING(DRESSING ELECTRODE)OR WELDING,IF  
THE LIMITS ARE EXCEEDED.FOR THORIUM ELECTRODES USE A DUST MASK(FOR  
RADIO ACTIVE PARTICLES).USE NIOSH APPROVED RESPIRATOR(29 CFR  
1910.134).

Ventilation:LOCAL EXHAUST AT THE ARC.

Protective Gloves:WELDER'S GLOVES

Eye Protection:HELMET OR FACE SHIELD WITH FILTER LENS

Other Prote

ctive Equipment:WEAR HAND,HEAD & BODY PROTECTION WHICH HELP  
TO PREVENT INJURY FROM RADIATION,SPARKS & ELECTRICAL SHOCK(FLAME  
RETARDANT).

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND  
RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR  
FOOTWEAR.

Supplemental Safety and Health

INSULATE FROM WORK AND GROUND.TRAIN THE WELDER NOT TO PERMIT  
ELECTRICALLY LIVE PARTS TO CONTACT SKIN OR CLOTHING OR GLOVES IF  
THEY ARE WET.

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

HCC:N1

Boiling Pt:B.P. Text:10652F

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

Spec Gravity:19

Solubility in Water:INSOLUBLE

Appearance and Odor:TIN-WHITE METAL NO ODOR

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

Stability Indicator/Materials to Avoid:YES

OXIDIZERS ESPECIALLY AT ELEVATED TEMPERATURES,STRONG  
ACIDS,BF3,F,IF5,AND MIXING LEAD OXIDE WITH TUNGSTEN DUST.

Stability Condition to Avoid:THORIUM DECAYS BY RADIOACTIVITY.

Haz

ardous Decomposition Products:NONE

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

Waste Disposal Methods:DISPOSE OF THE MATERIAL IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. TUNGSTEN SCRAP AND DUST HAVE VALUE AND CAN BE RECLAIMED.

Disclaimer (provided with this information by the compiling agencies):  
This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.