

GTE PRODUCTS CORP PRECISION MATERIALS PRODUCTS -- THORIA TUNGSTEN ELECTRODES --
3439-00-132-6710

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

Product ID:THORIA TUNGSTEN ELECTRODES

MSDS Date:10/26/1991

FSC:3439

NIIN:00-132-6710

MSDS Number: BWMNP

=== Responsible Party ===

Company Name:GTE PRODUCTS CORP PRECISION MATERIALS PRODUCTS

Address:CHEMICAL AND METALLURGICAL DIV.

Box:70

City:TOWANDA

State:PA

ZIP:1884

9

Country:US

Info Phone Num:717-265-2121

Emergency Phone Num:717-265-2121

CAGE:98251

=== Contractor Identification ===

Company Name:GTE PRODUCTS CORP PRECISION MATERIALS PRODUCTS

Box:70

City:TOWANDA

State:PA

ZIP:18848-0070

Country:US

Phone:717-265-2121

CAGE:98251

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:TUNGSTE

N
CAS:7440-33-7
RTECS #:YO7175000
Fraction by Wt: 98 - 99%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:NOE ESTABLISHED
ACGIH TLV:1 MG/M3/3 STEL; 9495

Ingred Name:THORIUM DIOXIDE (SARA 313)
CAS:1314-20-1
RTECS #:XO6950000
Fraction by Wt: 1 - 2%
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:LD50 (ORAL RAT) IS NOT RELEVANT.

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:NO

OSHA:NO

Health Hazards Acute and Chronic:TARGET ORGANS:LUNGS, EYES, SKIN.

ACUTE- FUMES CAN CAUSE EYES, NOSE & THROAT IRRITATION, DIZZINESS, HEADACHE, NAUSEA, COUGH. THORIUM DIOXIDE IS AN ALPHA EMITER & ITS HAZARD IS DUST/FUMES INHALATION. AR C RAYS & UV CAN INJURE EYES & BURN SKIN. ELECTRIC SHOCK CAN KILL. CHRONIC- MAY CAUSE LUNG DISEASE.

Explanation of Carcinogenicity:CONTAINS THORIUM OXIDE.

Effects of Overexposure:EYES, SKIN, RESPIRATORY TRACT IRRITATION, DIZZINESS, W

ATERY EYES, HEADACHE, NAUSEA, BREATHING DIFFICULTY, COUGHING, CHEST PAINS, FEVER, BODY ACHE, CHILLS. EYE INJURY, SKIN BURNS, CONVULSION, MUSCULAR WEAKNESS, LOSS OF CONSCIOUSNESS

Medical Cond Aggravated by Exposure:PERSONS WITH IMPAIRED PULMONARY FUNCTION, AIRWAY DISEASES AND CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, CHRONIC BRONCHITIS, ETC... CAN BE AGGRAVATED BY THE EXPOSURE.

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

First Aid:EMPLOY FIRST AID TECHNIQUE RECOMMENDED BY RED CROSS.

INHALATION:REMOVE FROM EXPOSURE. SEE PHYSICIAN. FOR ELECTRIC SHOCK, DISCONNECT POWER. SKIN:FOR ARC BURNS, APPLY COLD, CLEAN COMPRESSES AND CALL A P HYSICIAN. EYE:FLUSH WITH WATER FOR 15 MINUTES. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

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

Flash Point:NONFLAMMABLE

Extinguishing Media:WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL FOR SURROUNDING FIRE. USE WATER SPRAY TO COO

L FIRE EXPOSED
CONTAINERS.

Fire Fighting Procedures:WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED
SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:WELDING ARC AND SPARKS CAN IGNITE
COMBUSTIBLES.

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

Spill Release Procedures:NOT RELEVANT
Neutralizing Agent:NOT RELEVANT

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

Handling and Storage Precautions:STORE IN DRY PLACE.

Other Precautio

ns:AVOID BREATHING FUMES. USE WITH ADEQUATE VENTILATION.

WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING AND DRINKING.

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

Respiratory Protection:USE NIOSH APPROVED SUPPLIED AIR RESPIRATORY
PROTECTION OR RESPIRABLE FUME RESPIRATOR WHEN WELDING, BRAZING OR
SOLDERING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION
DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:LOCAL EXHAUST VENTILATION SHOULD BE USED TO CONT
ROL

EXPOSURE TO AIRBORNE FUMES WHENEVER POSSIBLE.

Protective Gloves:FLAME-PROOF WELDING GLOVES

Eye Protection:SAFETY GLASSES UNDER WELDING HELMET

Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER, WORK
CLOTHING AND APRON AS REQUIRED.

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

Supplemental Safety and Health

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

HCC:T6

NRC/St

ate Lic Num:NOT RELEVANT
Boiling Pt:B.P. Text:10220F,5660
Melt/Freeze Pt:M.P/F.P Text: 6170F,3410
Spec Gravity:19
Evaporation Rate & Reference:NOT RELEVANT
Solubility in Water:INSOLUBLE
Appearance and Odor:GRAY METAL - NO ODOR

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

Stability Indicator/Materials to Avoid:YES

NONE

Hazardous Decomposition Products:WELDING FUMES (OXIDES OF METAL BEING WELD) AND GASES SUCH AS OZONE, CARBON MONOXIDE, CARBON DIOXIDE, NITROGEN OXIDES...

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

Waste Disposal Methods:PRIOR TO DISPOSAL, CONSIDER IF MATERIAL HAS RECOVERY VALUE. DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. PREVENT WASTE FROM CONTAMINATING ENVIRONMENT.

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