

TUNGSTON MANUFACTURING CO LTD, EISHERGATE -- TUNGSTON WELDING ELECTRODES --
3439-00-105-9948

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

Product ID:TUNGSTON WELDING ELECTRODES

MSDS Date:04/24/1992

FSC:3439

NIIN:00-105-9948

MSDS Number: BPFPM

=== Responsible Party ===

Company Name:TUNGSTON MANUFACTURING CO LTD, EISHERGATE

Address:PORTSLADE,BRIGHTON, SUSSEX BN41 1PY, UK.

City:CHARLOTTE (AGENT:WORLDWIDE WELD
ING INC)

State:NC

ZIP:28221

Country:US

Info Phone Num:704-596-0123

Emergency Phone Num:704-596-0123

CAGE:K1256

=== Contractor Identification ===

Company Name:TUNGSTON MANUFACTURING CO LTD, EISHERGATE

Address:PORTSLADE,BRIGHTON, SUSSEX BN41 1PY, UK.

Box:City:CHARLOTTE (AGENT:WORLDWIDE WELDING INC)

State:NC

ZIP:28221

Country:US

Phone:704-596-0123

CAGE:K1256

Company Name:WORLD WIDE WELDING INC

Address:3300-S WOODPARK BLVD

Box:217006

City:CHARLOTTE

State:NC

ZIP:28221

Country:US

Phone:704-596-0123

CA

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Composition/Information on Ingredients
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Ingred Name:TUNGSTEN
CAS:7440-33-7
RTECS #:YO7175000
Fraction by Wt: >99.9%
Other REC Limits:NONE SPECIFIED
OSHA PEL:5 MG/M3/ 10 STEL
ACGIH TLV:5 MG/M3/10 STEL;9192

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Hazards Identification
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:SHORT TERM EXPOSURE TO WELDING FUMES,

GASES OR DUST MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA,
FEVER, DRYNESS AND/OR IRRITATION OF NOSE, THROAT AND EYES. SKIN
SENSITIVITY MAY ALSO BE NOTED. LONG TERM EXPOSURE TO
FUMES/GASES/DUST MAY CAUSE PULMONARY IRRITATION OR PNEUMOCONIOSIS;
& SIDEROSIS FROM IRON FUMES.

Explanation of Carcinogenicity:RESPIRATORY CANCER FROM WELDING IS
UNCONFIRMED.

Effects of Overexposure:EXPOSURE TO WELDING FUMES MAY RESULT IN
DISCOMFORT SUCH AS DIZZINESS, NAUSEA, FEVER, DRYNESS
AND/OR

IRRITATION OF NOSE, THROAT AND EYES. SKIN SENSITIVITY MAY ALSO BE
NOTED. WATERY EYES, HEADACHE, BREATHING DIFFICULTY, FREQUENT
COUGHING AND/OR CHEST PAINS MAY OCCUR FROM ACUTE EXPOSURE.

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH IMPAIRED PULMONARY
FUNCTION OR ILLNESS MAY HAVE SYMPTOMS EXACERBATED BY IRRITANTS
CONTAINED IN WELDING FUMES.

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First Aid Measures
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First Aid:IN CASE OF ELECTRICAL SHOCK, TURN OFF POWER
PRIOR TO REMOVAL
FROM EXPOSURE AREA AND ADMINISTRATION OF FIRST AID. REMOVE FROM
EXPOSURE AREA AND CALL FOR MEDICAL AID. ADMINISTER OXYGEN IF
BREATHING IS DIFFICULT. IF NOT BREATHING, BEGIN ARTIFICIAL
RESPIRATION. IF NO DETECTABLE PULSE, BEGIN EXTERNAL HEART MASSAGE.
EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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Fire Fighting Measures
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Extinguishing Media:NONCOMBUSTIBLE. USE EXTINGUISHING MEDIA APPROPRIATE

TO THE SURROUNDING FIRE.

Fire Fighting Procedures: TO EXTINGUISH A METAL POWDER FIRE USE DRY SAND, OR CLASS D FIRE EXTINGUISHERS. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard: FIRE OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF HAZARDOUS DECOMPOSITION PRODUCTS.

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

Spill Release Procedures: CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES AND PLACE IN SUITABLE DOT APPROVED CONTAINERS. AVOID INHALATION AND SKIN EXPOSURE.

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

Handling and Storage Precautions: WEAR GLOVES AND FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Other Precautions: PROVIDE PROTECTIVE SCREENS TO SHIELD OTHERS. WHEN ELECTRODES AND FLUXES ARE CONSUMED, THE FUME AND GAS DECOMPOSITION PRODUCTS GENERATED ARE DIFFERENT IN FORM FROM THE INGREDIENTS LISTED. NEW COMPOUNDS NOT IN THE ELECTRODES MAY FORM.

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

Respiratory Protection: USE SCBA OR AIR SUPPLIED RESPIRATOR WHEN CUTTING, GRINDING OR WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST OR GENERAL VENTILATION DOES NOT KEEP EXPOSURE BELOW RECOMMENDED LIMITS. USE ONLY NIOSH APPROVED RESPIRATORS.

Ventilation: USE ENOUGH VENTILATION WHEN CUTTING, GRINDING OR WELDING TO KEEP THE DUST, FUMES & GASES FROM THE WORKERS BREATHING ZONE

Protective Gloves: FLAMEPROOF GAUNTLET GLOVES

Eye Protection: OSHA APPROVED GOGGLES/FACE SHIELD W/LENS

Other Protective Equipment: FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Work Hygienic Practices: WASH THOROUGHLY BEFORE EATING OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

WELDING AND HOT CUTTING FUMES & GASES CANNOT BE CLASSIFIED SIMPLY. THE

IR COMPOSITION AND QUANTITY ARE DEPENDENT ON THE METAL BEING WELDED, THE PROCEDURES, PROCESSES AND THE TYPE OF WIRE OR ELECTRODES USED. OTHER INFLUENCING FACTORS ARE THE PRESENCE OF CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

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

HCC:N1

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

Melt/Freeze Pt:M.P/F.P Text:6116F,3380C

Spec Gravity:19.3

Appearance and Odor:GREY METAL, NO ODOR.

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

Stability Indicator/Materials to Avoid:YES

MINERAL ACIDS AND STRONG OXIDIZING AGENTS

Stability Condition to Avoid:NONE

Hazardous Decomposition Products:WELDING/CUTTING OPERATIONS MAY INCLUDE ELEMENTAL METALS, OXIDES OF THE METALS, FUMES/GASES & ELECTROMAGNETIC RADIATION.

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

Waste Disposal Methods:DISPOSE I/A/W FEDERAL, STATE & LOCAL REGULATIONS

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