

AMERICAN FILLER METALS CO. -- 1 & 2% TUNGSTEN -- 3439-00-105-9948
===== Product Identification =====

Product ID:1 & 2% TUNGSTEN
MSDS Date:01/03/1995
FSC:3439
NIIN:00-105-9948
Status Code:A
MSDS Number: CJKPV
=== Responsible Party ===
Company Name:AMERICAN FILLER METALS CO.
Address:6060 DONOHO
City:HOUSTON
State:TX
ZIP:77033
Country:US
Info Phone Num:800-394-4550
Emergency Phone Num:800-394-4550
CA
GE:TO230
=== Contractor Identification ===
Company Name:AMERICAN FILLER METALS CO.
Address:6060 DONOHO
Box:City:HOUSTON
State:TX
ZIP:77033
Country:US
Phone:800-394-4550
CAGE:TO230
Company Name:CMAX INC
Address:6127 PERIMETER PKY
Box:11647
City:MONTGOMERY
State:AL
ZIP:36111
Country:US
Phone:334-613-0500/ FAX: 2922
Contract Num:SP0400-99-V-1240
CAGE:2Y223

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

Ingred Name:TUNGSTEN
CAS:7440-33-7
RTECS #:YO7175000
ACGIH TLV:5 MG/M3
A

CGIH STEL:10 MG/M3

Ingred Name:ZIRCONIUM OXIDE

CAS:1314-23-4

RTECS #:ZH8800000

Ingred Name:THORIUM OXIDE

CAS:1314-20-1

RTECS #:XO6950000

< Wt:2.

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:SHORT TERM OVEREXPOSURE TO WELDING

FUMES MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA OR IRRITATION OF NOSE, THROAT OR EYE

S. INDUSTRIALLY TUNGSTEN THORIA

ALLOY DOES NOT CONSTITUTE AN IMPORTANT HEALTH HAZARD. EXPOSURE IS RELATED CHIEFLY TO THE DUST ARISING OUT OF GRINDING AND MACHINING OPERATIONS. CHRONIC INHALATION OF THE DUST MAY CAUSE DAMAGE IN HUMANS.

Explanation of Carcinogenicity:THORIUM OXIDE COMPOUNDS ARE REQUIRED BY OSHA TO BE CONSIDERED CARCINOGENIC.

Effects of Overexposure:HEADACHE, DIZZINESS, NAUSEA, IRRITATION OF EYES, NOSE AND THROAT AND BURNS IF PROTECTIVE MEASURES ARE NOT

OBSERVED.

Medical Cond Aggravated by Exposure:NONE SPECIFICALLY KNOWN.

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

First Aid:EYE CONTACT-IF IRRITATION OCCURS, FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MIN, IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

SKIN CONTACT-WASH WITH SOAP & WATER, ISOLATE FROM EXPOSURE IF RASH OCCUR S. SEEK MEDICAL ATTENTION IF RASH PERSISTS. INHALATION-IF LARGE AMOUNTS OF DUSTS ARE INHALED, MOVE EXPOSED PERSON TO FRESH AIR

. IF NECESSARY PERFORM ARTIFICIAL RESPIRATION & SEEK MEDICAL ATTENTION. IN GESTION-SEEK MEDICAL ATTENTION. GIVE LARGE QUANTITIES OF WATER & INDUCE VOMITING. DO NOT MAKE AN UNCONSCIOUS PERSON VOMIT. OTHER-WOUNDS SHOULD BE CLEANED THOROUGHLY ASAP.

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

Extinguishing Media:USE CLASS D FIRE EXTINGUISHING AGENT. (DRY POWDER)

Fire Fighting Procedures:FOR A POWDER FIRE CONFINED TO A SMALL AREA USE A RESPIRATOR APPROVED FO

R RADIONUCLIDES. FOR LARGE FIRES USE SELF
CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:DUSTS MAY PRESENT A FIRE EXPLOSION HAZARD
UNDER RARE FAVORING CONDITIONS OF PARTICLE SIZE, DISPERSION &
STRONG IGNITION SOURCE. HOWEVER THIS NOT EXPECTED TO BE A PROBLEM
UNDER HANDLING CONDITIONS.

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

Spill Release Procedures:A SOLID, THIS MATERIAL POSES NO PROBLEMS WITH
RELEASE OR SPILLS.

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=== Handling and Storage =====

Other Precautions:MAINTAIN GOOD HOUSEKEEPING PROCEDURES TO PREVENT DUST
ACCUMULATION FROM GRINDING, ETC. CLEANUP USING METHODS WHICH AVOID
DUST GENERATION SUCH AS WET MOPING OR VACUUMING. AVOID DUST
INHALATION & DIRECT SKIN CONTACT WITH DUST. WASH HANDS & SKIN
THOROUGHLY IF EXPOSED TO DUST OR MIST. ARC RAYS CAN INJUR E EYES &
BURN SKIN.

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

Respiratory Protecti
on:APPROPRIATE NIOSH APPROVED RESPIRATOR FOR
EQUIPPED WITH RADIONUCLIDES FILTER IF AIRBORNE DUST CONCENTRATIONS
ARE PRESENT & EXCEED THE APPROPRIATE LIMITS. ALL REQUIREMENTS SET
FORTH IN 29CFR 1910.134 MUS T MEETING.

Ventilation:USE LOCAL EXHAUST VENTILATION WHICH IS ADEQUATE TO LIMIT
PERSONAL EXPOSURE TO AIRBORNE DUST LEVEL WHICH DO NOT EXCEED THE
APPROPRIATE LIMITS. USE RESPIRATORY.

Protective Gloves:WELDERS GLOVES ARE RECOMMENDED.

Eye Protection:SAFETY GLASSES WITH SIDE SHIEL
D OR GOGGLES ARE
RECOMMENDED.

Other Protective Equipment:WEAR APPROPRIATE HAND, HEAD AND BODY
PROTECTIONTO PREVENT INJURY FROM SPARKS & ELECTRICAL SHOCK.

Work Hygienic Practices:FOR MAXMUM SAFETY: BE CERTIFIED FOR AND WEAR A
RESPIRATOR AT ALL TIMES WHEN WELDING OR BRAZING.

Supplemental Safety and Health
EYE PROTECTION IS REQUIRED AS SET FORTH BY ANSI 257.1. PROTECTIVE
CLOTHING AS SET FORTH FOR METAL WORKERS.

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

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C:N1
Boiling Pt:=5000.C, 9032.F
Melt/Freeze Pt:=3400.C, #####F
Spec Gravity:19.3
Solubility in Water:INSOLUBLE
Appearance and Odor:GRAY TO DARK GRAY METAL - NO ODOR.

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

Stability Indicator/Materials to Avoid:YES
THE POWDER METAL MAY IGNITE ON CONTACT WITH AIR OR OXIDANTS.
Stability Condition to Avoid:TUNGSTEN IS A STABLE MATERIAL. THORIUM
UNDERGOES SPONTANEOUS RADIOACTIVE DECAY.
Hazardous Decomposition Products:NONE.

===== Toxicological Information =====

Toxicological Information:TUNGSTEN THORIA ALLOY SOLIDS, DO NOT
CONSTITUTE AN IMPOTANT HEALTH HAZARD. EXPOSURE IS RELATED CHIEFLY
TO ANY DUST CREATED. HEAVY EXPOSURE TO THE DUST OR THE INGESTION OF
LARGE AMOUNTS OF THE SOLUBLE COMPOUNDS PROCEDURES CHANGES IN BODY
WEIGHT, BEHAVIOR, BLOOD CELLS, ETC IN EXPERIMENTAL ANIMALS. THROIUM
TUNGSTEN SOLIDS DO NOT CONSTITUTE AN IMPORTANT RADIOLOGICAL HEALTH
HAZARD. HOWEVER
, RADIOLOGICA L HEALTH HAZARDS MAY EXISTS IF THE
MATERIAL IS PRESENT IN A FORM THAT MAY BE INHALED OR INGESTED.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ANY APPLICABLE
LOCAL, STATE AND FEDERAL REGULATIONS. MATERIAL INTENDED FOR
DISPOSAL MAY BE SOLD FOR RECLAIM.

===== MSDS Transport Information =====

Transport Information:THERE ARE NO SPECIAL DOT REQUIREMENTS ASSOCIATED
WITH THE TRANSPORT OF THIS PRODUCT.

===== Regulatory Information =====

State Regulatory Information:THE STATE OF CALIFORNIA REQUIRE THE
FOLLOWING
INFORMATION. WARNING: THIS PRODUCT CONTAINS A
CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO
CAUSE CANCER.

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