ATTN: SAFETY DIRECTOR
UNIV OF WISC-WHITEWATER
PURCHASING OFFICE
800 W MAIN ST
WHITEWATER WI 53190-1705

EMERGENCY PHONE 1-314-771-5765
DATE: 09/08/93
CUST#: 2-097-94816
PD#: UND-41251

MATERIAL SAFETY DATA SHEET
PAGE 1

SECTION 1. -- -- -- -- -- CHEMICAL IDENTIFICATION -- -- -- -- --
PRODUCT #: T2629
NAME: TUNGSTIC ACID SODIUM DIHYDRATE

SECTION 2. -- -- -- -- COMPOSITION/INFORMATION ON INGREDIENTS -- -- -- --
CAS #: 10213-10-2
MF: Na2H3O4W
SYNONYMS: SODIUM TUNGSTATE, DIHYDRATE

SECTION 3. -- -- -- -- HAZARDS IDENTIFICATION -- -- -- --
LABEL PRECAUTIONARY STATEMENTS
TOXIC (USA DEFINITION)
HARMFUL (EUROPEAN DEFINITION)
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
IRRITATING TO EYES.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
WEAR PROTECTIVE CLOTHING.

SECTION 4. -- -- -- -- FIRST-AID MEASURES -- -- -- --
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. -- -- -- -- FIRE FIGHTING MEASURES -- -- -- --
EXTINGUISHING MEDIA
NONCOMBUSTIBLE.
USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.
SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.
UNUSUAL FIRE AND EXPLOSIONS HAZARDS

CONTINUED ON NEXT PAGE
PRODUCT #: T2629  
MF#: NA204W1  
NAME: TUNGSTIC ACID SODIUM DIHYDRATE

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6.  -  -  -  -  -  -  -  -  -  ACCIDENTAL RELEASE MEASURES -  -  -  -  -  -
WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY
RUBBER GLOVES.
Sweep up, place in a bag and hold for waste disposal.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7.  -  -  -  -  -  -  -  -  -  HANDLING AND STORAGE -  -  -  -  -  -
REFER TO SECTION 8.

SECTION 8.  -  -  -  -  -  -  -  -  -  EXPOSURE CONTROLS/PERSONAL PROTECTION -  -  -  -  -
CHEMICAL SAFETY GOGGLES.
RUBBER GLOVES.
NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR
EXPOSURE ABOVE THE ACGIH TLV.
SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
AVOID BREATHING DUST.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
TOXIC.
EYE IRRITANT.
KEEP TIGHTLY CLOSED.
STORE IN A COOL, DRY PLACE.

SECTION 9.  -  -  -  -  -  -  -  -  -  PHYSICAL AND CHEMICAL PROPERTIES -  -  -  -  -

APPEARANCE AND ODOR
WHITE CRYSTALS
SPECIFIC GRAVITY: 4.180

SECTION 10.  -  -  -  -  -  -  -  -  -  STABILITY AND REACTIVITY -  -  -  -  -

CONTINUED ON NEXT PAGE
INCOMPATIBILITIES
STRONG OXIDIZING AGENTS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
CAUSES EYE IRRITATION.
MAY CAUSE SKIN IRRITATION.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

ADDITIONAL INFORMATION
GUINEA PIGS TREATED ORALLY OR INTRAVENOUSLY WITH SODIUM TUNGSTATE
DIHYDRATE SUFFERED FROM ANOREXIA, COLIC, INCOORDINATION OF MOVEMENT,
TREMORING AND DYSPNEA. ANIMALS SUFFERED A WEIGHT LOSS BEFORE A
DELAYED DEATH.

RTCE5 NO: Y379400000
TUNGSTIC ACID, SODIUM SALT, DIHYDRATE

TOXICITY DATA
TPR-RAT LD50: 204 MG/KG
TPR-MUS LD50: 145 MG/KG
AIP-TAK 154, 243, 65
AIP-TAK 154, 243, 65

TARGET ORGAN DATA
BEHAVIORAL (STIMULATION)
BEHAVIORAL (COMA)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

SECTION 12. ECOLOGICAL INFORMATION

DATA NOT YET AVAILABLE.

SECTION 13. DISPOSAL CONSIDERATIONS

CAUTIOUSLY DISSOLVE THE MATERIAL IN WATER, NEUTRALIZE IMMEDIATELY WITH
SODIUM CARBONATE, OR FIRST ADD A LITTLE HYDROCHLORIC ACID FOLLOWED BY
SODIUM CARBONATE IF THE MATERIAL DOES NOT DISSOLVE COMPLETELY.
ADD CALCIUM CHLORIDE IN EXCESS OF THE AMOUNT NEEDED TO PRECIPITATE
THE FLUORIDE AND/OR CARBONATE. SEPARATE THE INSOLUBLES AND BURY IN A

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

PRODUCT #: T2629
NAME: TUNGSTIC ACID SODIUM DIHYDRATE
MF: Na₂WO₄·2H₂O

LANDFILL SITE APPROVED FOR HAZARDOUS-WASTE DISPOSAL.
OBSERVE ALL FEDERAL, STAT AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. TRANSPORT INFORMATION
CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. REGULATORY INFORMATION
TLV AND SOURCE
FOR TUNGSTEN, SOLUBLE COMPOUNDS AS TUNGSTEN:
ACGIH TLV-TWA: 1 MG/M³; STEL: 3 MG/M³.
OSHA PEL: TWA 8H 1 MG/M³; STEL: 3 MG/M³.

REVIWS, STANDARDS AND REGULATIONS
ACGIH TLV-TWA 5 MG/(W)/M³; STEL 10 MG/(W)/M³; JANUARY 1993
OSHA STANDARD AIR; TWA 5 MG/(W)/M³; JANUARY 1993

DEL-AUSTRALIA: TWA 5 MG/(W)/M³; STEL 10 MG/(W)/M³; JANUARY 1993
DEL-BELGIUM: TWA 5 MG/(W)/M³; STEL 10 MG/(W)/M³; JANUARY 1993
DEL-FINLAND: TWA 5 MG/(W)/M³; JANUARY 1993
DEL-DENMARK: TWA 5 MG/(W)/M³; JANUARY 1993
DEL-DENMARK: TWA 5 MG/(W)/M³; JANUARY 1993
DEL-GERMANY: TWA 5 MG/(W)/M³; JANUARY 1993
DEL-SWITZERLAND: TWA 5 MG/(W)/M³; JANUARY 1993
DEL-UNITED KINGDOM: TWA 5 MG/(W)/M³; STEL 10 MG/(W)/M³; JANUARY 1993
DEL IN BULGARIA: COLONIA, JORDAN, KOREA, NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV
NDIS REO TO TUNGSTEN, SOLUBLE AIR; LOH TWA 1 MG/(W)/M³; STEL 3 MG/M³
NDIS KH DSMS 92-100.72
MOES 1983: HZD X2532; MS 21; TNE 186; NOS 41; TNE 2254; TFE 1653

SECTION 16. OTHER INFORMATION
THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO
BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA SHALL NOT BE
HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH
THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR
ADDITIONAL TERMS AND CONDITIONS OF SALE.

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