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M A T E R I A L S A F E T Y D A T A S H E E T

SECTION 1. - - - - - CHEMICAL IDENTIFICATION- - - - -

CATALOG #: 244643
NAME: TIN(II) OXIDE, POWDER, 10 MICRON, 99+%

SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -

CAS #: 21651-19-4
MF: OSN
EC NO: 244-499-5

SYNONYMS

STANNOUS OXIDE * TIN OXIDE (OSHA) * TIN OXIDE (SNO) * TIN OXIDE
(SN2O2) * TIN(II) OXIDE *

SECTION 3. - - - - - HAZARDS IDENTIFICATION - - - - -

DATA NOT AVAILABLE

SECTION 4. - - - - - FIRST-AID MEASURES- - - - -

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

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

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- - - - -

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT
GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
DO NOT BREATHE DUST.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
KEEP CONTAINER CLOSED.
STORE IN A COOL DRY PLACE.
AIR SENSITIVE

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

DATA NOT AVAILABLE

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

CONDITIONS TO AVOID

SENSITIVE TO AIR

INCOMPATIBILITIES

STRONG OXIDIZING AGENTS

STRONG ACIDS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.

SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -

ACUTE EFFECTS

INORGANIC TIN SALTS ARE POORLY ABSORBED INTO THE BODY. WHEN PARENTERALLY ADMINISTERED TIN SALTS ARE HIGHLY TOXIC. TIN OXIDE INHALED AS A DUST OR FUME LEADS TO A BENIGN PNEUMOCONIOSIS WITH NO SIGN OF INTERFERENCE WITH PULMONARY FUNCTION. DEPOSITED DUST APPEARS NODULAR WITH THE PARTICLES BEING MOSTLY EXTRACELLULAR. NO NECROSIS, FOREIGN-BODY GIANT-CELL REACTION OR COLLAGEN FORMATION HAS BEEN SEEN. TIN SALTS THAT HAVE GAINED ACCESS TO THE BLOOD STREAM ARE HIGHLY TOXIC AND PRODUCE NEUROLOGIC DAMAGE AND PARALYSIS. WITH MOST COMMON TIN SALTS, THE TOXICITY PROFILE IS COMPLICATED BY HYDROLYSIS IN BODY FLUIDS PRODUCING UNPHYSIOLOGIC PH VALUES. THE REPORTED SYMPTOMS OF HYPEREMIA, VASCULAR CHANGES WITH BLEEDING IN THE CENTRAL NERVOUS SYSTEM, LIVER, HEART AND OTHER ORGANS MAY BE DUE TO TIN ITSELF OR TO THE UNPHYSIOLOGICAL PH CHANGES. INGESTION PRODUCES VOMITING DUE TO THE GASTRIC IRRITATION FROM THE ACTIVITY AND ASTRINGENCY OF TIN COMPOUNDS. INJECTION OF INORGANIC TIN SALTS PRODUCES DIARRHEA, MUSCLE PARALYSIS AND TWITCHING.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

MAY CAUSE SKIN IRRITATION.

MAY CAUSE EYE IRRITATION.

MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.

RTECS #: XQ3700000

TIN MONOXIDE

ADDITIONAL INFORMATION

ACGIH TLV-TWA: 2 MG/M3, TIN OXIDE AND INORGANIC COMPOUNDS AS TIN.

OSHA PEL-TWA: 2 MG/M3.

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 - - - - -

BURY IN A LANDFILL SITE APPROVED FOR THE DISPOSAL OF CHEMICAL AND HAZARDOUS WASTES.

OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - TRANSPORT INFORMATION - - - - -

CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - REGULATORY INFORMATION - - - - -

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

OSHA PEL (SHIPYARD):8H TWA 15 MG/M3, TOTAL DUST

CFRGBR 29,1915.1000,1993

OSHA PEL (SHIPYARD):8H TWA 5 MG/M3, RESPIRABLE FRACTION

CFRGBR 29,1915.1000,1993

NOES 1983: HZD 82157; NIS 4; TNF 71; NOS 4; TNE 2018; TFE 737

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES

EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 2001

SECTION 16. - - - - - OTHER INFORMATION - - - - -

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