

FISHER SCIENTIFIC CHEMICAL DIVISION -- TIN -- 6810-00-241-1186

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

Product ID:TIN

MSDS Date:11/09/1988

FSC:6810

NIIN:00-241-1186

MSDS Number: BHCMW

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC CHEMICAL DIVISION

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Info Phone Num:201-796-7100

Emergency Phone Num:201-796-7523

Preparer's Name:GASTON L. PI

LLORI

CAGE:1B464

=== Contractor Identification ===

Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV

Address:1 REAGENT LANE

Box:City:FAIRLAWN

State:NJ

ZIP:07410-2802

Country:US

Phone:201-796-7100

CAGE:1B464

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

Ingred Name:TIN

CAS:7440-31-5

RTECS #:XP7320000

Fraction by Wt: 100%

OSHA PEL:2 MG/M3

ACGIH TLV:2 MG/M3; 9192

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

Routes of Entry: Inhalation:YES Skin:

NO Ingestion:YES

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

Health Hazards Acute and Chronic:ACUTE: INHALE- RESPIRATORY IRRITATION, FLU-LIKE SYMPTOMS. MAY CAUSE IRRITATION TO EYES AND SKIN. INGEST- AT HIGH LEVELS OF CONCENTRATION; ABDOMINAL PAIN, NAUSEA, VOMITING, GASTRIC IRRITATION. CHRONIC: LOSS OF WEIGHT, CONSTIPATION. EYE- CONJUNCTIVITIS. SKIN- DERMATITIS. INHALE- BENIGN PNEUMOCONIOSIS W/OUT FIBROSIS.

Explanation of Carcinogenicity:NONE OF THE CHEMICALS IN THIS PRODUCT IS

LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

Effects of Overexposure:THIRST,A SWEET METALLIC TASTE IN MOUTH, COUGHING AND DRYNESS OF MOUTH. SKIN IRRITATION. EYE- MODERATE IRRITATION. GASTRIC IRRITATION AND DIARRHEA.

Medical Cond Aggravated by Exposure:PERSONS WITH A HISTORY OF SKIN AND RESPIRATORY DISORDERS MAY BE AT INCREASED RISK FROM EXPOSURE.

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

First Aid:INHALATION: REMOVE SUBJECT TO FRESH AIR.

EYE: FLUSH WITH

PLENTY OF WATER FOR 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION.

SKIN: WASH WITH SOAP AND WATER. INGESTION: DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

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

Autoignition Temp:Autoignition Temp Text:806F

Lower Limits:.19

Extinguishing Media:USE DRY SAND, DOLOMITE, GRAPHITE, SODIUM CHLORIDE, SODA ASH, OR APPROPRIATE METAL-EXTINGUISHING POWDER. DON'T USE WATER.

Fire Fighting Procedure

s:MOVE CONTAINER FROM FIRE AREA IF POSSIBLE.

COOL CONTAINERS EXPOSED TO FLAME WITH WATER FROM SIDE UNTIL WELL AFTER FIRE IS OUT.

Unusual Fire/Explosion Hazard:CONTAINERS MAY BURST WHEN EXPOSED TO HEAT OF FIRE. EXTINGUISH USING AGENT FOR TYPE OF FIRE. AVOID BREATHING FUMES FROM BURNING MATERIAL.

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

Spill Release Procedures:FOR LARGE SPILLS, SWEEP UP WITH A MINIMUM OF DUSTING AND PLACE ONTO SUITABLE, CLEAN, DRY

CONTAINERS FOR

RECLAMATION OR LATER DISPOSAL. RESIDUE SHOULD BE CLEANED UP USING A HIGH-EFFICIENCY PARTICULATE FILTER VACUUM.

Neutralizing Agent:NONE APPLICABLE FOR THIS MATERIAL

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

Handling and Storage Precautions:STORE AWAY FORM INCOMPATIBLE SUBSTANCES. AVOID DISPERSION OF DUST IN AIR. FINELY DIVIDED PARTICLES, DUST OR FUMES MAY BE A SLIGHT FIRE HAZARD.

Other Precautions:KEEP AWAY FROM SPARKS OR IGNITION SOURCE S.

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

Respiratory Protection:IF VENTILATION DOES NOT MAINTAIN INHALATION EXPOSURES BELOW PEL (TLV), USE NIOSH/MSHA APPROVED RESPIRATOR AS PER CURRENT 29 CFR 1910.134, INSTRUCTIONS/WARNINGS AND NIOSH-RESPIRATOR SELECTION.

Ventilation:MECHANICAL (GENERAL) VENTILATION IS REQUIRED. LOCAL EXHAUST MAY BE REQUIRED IF WORK AREA IS NOT VENTED.

Protective Gloves:RUBBER

Eye Protection:CHEMICAL SAFETY GOGGLES

Other Protective

Equipment:SAFETY SHOWER AND EYE BATH. OTHER EQUIPMENT AS REQUIRED TO MINIMIZE EXPOSURE FROM PROLONGED OR REPEATED CONTACT.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING. LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:449F,232C

Vapor Pres:1

Spec Gravity:7.28

Solubility in Water:INSOLUBLE

Appearance and Odor:AN ODORLESS, SILVER

-WHITE, LUSTROUS, SOFT, VERY

MALLEABLE AND DUCTILE METAL.

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

Stability Indicator/Materials to Avoid:YES

AMMONIUM NITRATE, BROMINE, BROMINE TRIFLUORIDE, CARBON TETRACHLORIDE AND WATER, CHLORINE. (SEE MSDS FOR LISTING)

Stability Condition to Avoid:ABNORMAL TEMPERATURES AND PRESSURES.

Hazardous Decomposition Products:THERMAL DECOMPOSITION MAY RELEASE STANNIC OXIDE.

Conditions to Avoid Polymerization:ABNORMAL TEMPERATURES

AND PRESSURES.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE
FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all l

iability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.