

MINE SAFETY APPLIANCES CO -- 5645 VENTILATION SMOKE TUBES -- 4940-01-015-1848

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Product Identification  
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Product ID:5645 VENTILATION SMOKE TUBES

MSDS Date:02/01/1989

FSC:4940

NIIN:01-015-1848

MSDS Number: BQKRB

=== Responsible Party ===

Company Name:MINE SAFETY APPLIANCES CO

Address:3880 MEADOWBROOK RD

Box:426

City:PITTSBURGH

State:PA

ZIP:15230

Country:US

Info Phone Num:412-967-3000

Emerg

ency Phone Num:412-967-3000

CAGE:55799

=== Contractor Identification ===

Company Name:MINE SAFETY APPLIANCES CO DBA MSA

Address:3880 MEADOWBROOK RD

Box:City:MURRYSVILLE

State:PA

ZIP:15668-1753

Country:US

Phone:724-733-9272

CAGE:55799

Company Name:SUMMIT ASSOCIATES

Address:10910-H SOUTHLAKE COURT

Box:City:RICHMOND

State:VA

ZIP:23236-3914

Country:US

Phone:804-794-1434

CAGE:9X866

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Composition/Information on Ingredients  
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Ingred Name:TIN TETRACHLORIDE, ANHYDROUS

CAS:7646

-78-8  
RTECS #:XP8750000  
Fraction by Wt: 50-60%  
OSHA PEL:2 MG SN/M3  
ACGIH TLV:2 MG SN/M3

Ingred Name:PUMICE  
CAS:1332-09-8  
Fraction by Wt: 40-50%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:THE TUPE CONTAINS ING 1 & 2. THE FOLLOWING ARE FORMED UPON  
REACTION WITH WATER AND MAY BE ENCOUNTERED DURING USE.  
RTECS #:9999999ZZ  
Other REC Limits:NONE RECOMMENDED

Ingred Name:HYDROGEN CHLORIDE (HYDROCHLORIC ACID) (SARA III)  
CAS:7647-01-0  
RTECS #:MW4025000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:C  
5 PPM  
ACGIH TLV:C 5 PPM; 9293  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:TIN OXIDE (STANNOUS II)  
CAS:7772-99-8  
RTECS #:XP8700000  
Other REC Limits:NONE RECOMMENDED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:SMOKE PUFF GENERATION IS UNDER MANUAL  
CONTROL & OVEREXPOSURE IS UNLIKELY UNDER INTENDED CONDITIONS OF  
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SE. PRODUCT CONTAINS SNCL4 WHICH IS CORROSIVE TO BODY TISSUES &  
REACTS WITH WATER VAPOR IN THE AI R TO PRODUCE TIN OXIDE SMOKE &  
HYDROCHLORIC ACID FUMES. HCL FUMES ARE IRRITATING TO BODY TISSUES  
ESPECIALLY THE EYES.  
Explanation of Carcinogenicity:NOT RELEVANT.  
Effects of Overexposure:EYE, SKIN, RESPIRATORY SYSTEM IRRITATION,  
COUGHING, SHORTNESS OF BREATH, HEADACHE, NAUSEA, VOMITING. DIRECT  
CONTACT WITH LIQUID SNCL4 PRODUCES ACID BURNS.  
Medical Cond Aggravated by Exposure:NONE

SPECIFIED BY MANUFACTURER.

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

First Aid:IF IRRITATION PERSISTS OR IS SEVERE, SEE A DOCTOR. EYE:FLUSH W/WATER 15 MIN, HOLD LIDS OPEN. INHALED:REMOVE FROM EXPOSURE. RESTORE BREATHING IF NECESSARY. INGESTED:DO NOT INDUCE VOMITING. GIVE 2 LARGE GLASSES OF MILK OR WATER AND GET IMMEDIATE MEDICAL CARE.

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

Flash Point:NON-FLAMMABLE

Extinguishing Media

:AS NEEDED FOR SURROUNDING FIRE.

Fire Fighting Procedures:WEAR IMPERVIOUS COVERING AND PRESSURE DEMAND SCBA WITH FULL FACEPIECE.

Unusual Fire/Explosion Hazard:TUBES MAY RUPTURE & EMIT TOXIC FUMES UNDER FIRE CONDITIONS. AVOID CONTACT WITH RUN-OFF WATER WHICH MAY BE ACIDIFIED BY LEACHED TUBE CONTENTS.

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

Spill Release Procedures:IF CONTENTS OF TUBE ARE RELEASED, EVACUATE & VENTILATE AREA UNTIL SMOKE SUBSIDES. AVOID CONTACT WITH CONTENTS OF TUBE AND BREATHING THE SMOKE. SWEEP UP AND PLACE IN WATER W/ 1 OZ/GAL SODIUM BICARBONATE .

Neutralizing Agent:SODIUM BICARBONATE.

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

Handling and Storage Precautions:STORE TUBES IN COOL, DRY LOCATION PROTECTED FROM CRUSHING AND IMPACT FORCES.

Other Precautions:NONE

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

Respiratory Protection:DUE TO THE SMALL AMOUNT OF  $\text{SnCl}_4$  AND THE

CONTROLLED RELEASE RATE, PROTECTIVE EQUIPMENT IS NOT INDICATED FOR NORMAL CONDITIONS OF USE. AVOID BREATHING THE TUBE EMISSIONS - (HMIS) OR WEAR A NIOSH APPROVED RESPIRATOR.

Ventilation:NONE NECESSARY.

Protective Gloves:NONE NECESSARY.

Eye Protection:NONE NECESSARY.

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:WASH HANDS AFTER USING PRODUCT.

Supplemental Safety and Health

MSDS RECEIVED FROM NAVY (FOCAL POINT N). CAGE CODE AND NSN IDENTIFIED

BY THEM. THIS PRODUCT IS FOR USE IN DETERMINATION OF DIRECTION AND VELOCITY OF VENTILATION AIR CURRENTS. AVOID BREATHING THE EMISSIONS FROM THE TUBE.

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

HCC:C1

NRC/State Lic Num:NONE

Appearance and Odor:GRAY TO BLACK GRANULES, ACID ODOR

Percent Volatiles by Volume:50

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

Stability Indicator/Materials to Avoid:YES

STRONG BASES, ALCOHOLS, ETHYLENE OXIDE, ALKYL NITRATES, AMINES

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:SNCL4 IS STRONGLY ACIDIC AND REACTS WITH WATER VAPOR IN AIR TO FORM TIN OXIDES (SMOKE) AND HYDROCHLORIC ACID.

Conditions to Avoid Polymerization:WILL NOT OCCUR

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

Waste Disposal Methods:1. FILTER SOLIDS FROM NEUTRALIZATION WATER AND DISPOSE TO TRASH. NEUTRALIZED WATER MAY BE Poured DOWN DRAIN.

2.TAPE

OVER ENDS OF EXHAUSTED TUBES AND DISPOSE I/A/W FEDERAL, STATE & LOCAL REGULATIONS.

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