



TIN-O-FLUX

Material Safety Data Sheet

Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. Black Swan Manufacturing Co. urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety, you should notify your employees, agents, and contractors of the information on the sheet.

SECTION I - GENERAL INFORMATION				
Black Swan Manufacturing Co. 4540 W. Thomas Street Chicago, IL 60651-3318 Telephone No: 1-773-227-3700 Fax No: 1-773-227-3705		For chemical emergencies during transportation only call INFOTRAC 1-800-535-5053 24 hours per day - 7 days a week		
Date Prepared 01/01/08		Trade Name TIN-O-FLUX		
SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION				
HAZARDOUS COMPONENTS	CAS#	APPROX%	ACGIH-TLV	OSHA-PEL
PETROLATUM	8009-03-8	75-85	5 mg/m3	5 mg/m3
ZINC CHLORIDE	7646-85-7	5-10	1 mg/m3 (fume) 2 mg/m3 STEL	1 mg/m3 (fume)
AMMONIUM CHLORIDE	12125-02-9	1-4	10 mg/m3 (fume)	NONE ESTABLISHED
TIN (METAL)	7440-31-5	4-8	2 mg/m3	2mg/m3
COPPER (FUME)	7440-50-8	0-1	0.2mg/m3 fume	0.1 mg/m3 (fume)
*Title III Section 313 Supplier Notification: this product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency planning and community Right-to-Know Act of 1966 and of 40CFR372. This information must be included in all MSDS's				

that are copied and distributed for this material.

<u>SHIPPING INFORMATION</u>		SPECIAL HAZARD DESIGNATIONS																			
NOT HAZARDOUS FOR SHIPPING PURPOSES.		<table border="0"> <tr> <td></td> <td><u>HMS</u></td> <td><u>HAZARD RATING</u></td> </tr> <tr> <td>HEALTH</td> <td>1</td> <td>0 - MINIMAL</td> </tr> <tr> <td>FLAMMABILITY</td> <td>0</td> <td>1- SLIGHT</td> </tr> <tr> <td>REACTIVITY</td> <td>0</td> <td>2- MODERATE</td> </tr> <tr> <td>PROTECTIVE EQUIPMENT</td> <td>A</td> <td>3- SERIOUS</td> </tr> <tr> <td></td> <td></td> <td>4- SEVERE</td> </tr> </table>		<u>HMS</u>	<u>HAZARD RATING</u>	HEALTH	1	0 - MINIMAL	FLAMMABILITY	0	1- SLIGHT	REACTIVITY	0	2- MODERATE	PROTECTIVE EQUIPMENT	A	3- SERIOUS			4- SEVERE	
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SECTION III - PHYSICAL DATA																					
APPEARANCE GREEN PASTE	ODOR VERY LITTLE ODOR	BOILING POINT 638Â°Â°F/337Â°C																			
SPECIFIC GRAVITY (H2O=1) 1.1	VAPOR PRESSURE (mm Hg.) N/A	VOLATILE BY VOLUME (%) N/A																			
VAPOR DENSITY (AIR=1) (AIR=1) @ 482Â°C = 50	EVAPORATION RATE (BUAC=1) N/A	SOLUBILITY IN WATER NEGLIGIBLE																			
SECTION IV - FIRE AND EXPLOSION HAZARD DATA																					
FLASH POINT (METHOD USED)	FLAMMABLE LIMITS	LEL	UEL																		
N/A	(PERCENT BY VOLUME)	N/A	N/A																		
FIRE EXTINGUISHING MEDIA SMALL FIRES: USE DRY CHEMICAL, CO2, WATER OR FOAM EXTINGUISHER LARGE FIRES: EVACUATE AREA AND CALL FIRE DEPARTMENT IMMEDIATELY																					
SPECIAL FIRE FIGHTING PROCEDURES FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING FOR FIRES IN AREAS WHERE CHEMICALS ARE USED OR STORED.																					

UNUSUAL FIRE AND EXPLOSION HAZARD

NONE KNOWN

SECTION V - HEALTH HAZARD DATAPRIMARY ROUTES OR ENTRY Inhalation Skin contact Eye contact Ingestion**EFFECT OF OVEREXPOSURE**

NONE KNOWN

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

MAY CAUSE BURNS TO THE EYE AND SKIN. INHALATION OF FUMES MAY CAUSE RESPIRATORY IRRITATION, METAL FUME FEVER, CHILLS, NAUSEA, VOMITING AND PULMONARY EDEMA. SWALLOWING MAY CAUSE BURNS TO THE MOUTH OR THROAT, VOMITING, DIARRHEA, AND KIDNEY OR LIVER DISORDERS. MAY BE FATAL. SYMPTOMS MAY BE DELAYE.

EMERGENCY AND FIRST AID PROCEDURES

EYES: REMOVE CONTACT LENSES IF ANY. RINSE EYES WITH WATER FOR 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER. CALL A PHYSICIAN OR POISON CONTROL CENTER IF IRRITATION PERSISTS.

INHALATION: MOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. KEEP VICTIM QUIET AND WARM. CALL POISON CONTROL CENTER OR PHYSICIAN IMMEDIATELY.

SECTION VI - REACTIVITY

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	NONE

INCOMPATIBILITY (MATERIALS TO AVOID)

MATERIAL MAY BE INCOMPATIBLE WITH NYLON AND/OR CELCON PLASTICS. CYANIDES MAY RELEASE HCN GAS WHEN MIXED WITH ZINC CHLORIDE.

HAZARDOUS DECOMPOSITION PRODUCTS

STRONG OXIDIZING AGENTS, POTASSIUM, CYANIDES AND SULFIDES.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	NONE

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

VENTILATE AREA, STOP LEAK IF IT CAN BE DONE WITHOUT RISK. PERSONNEL CLEANING UP THE SPILL SHOULD WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. TAKE UP SPILL WITH SAND, EARTH OR OTHER ABSORBENT MATERIAL AND PLACE INTO A CLEAN DRY LEAK-PROOF CONTAINER.

WASTE DISPOSAL METHOD

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. IT IS THE RESPONSIBILITY OF THE END-USER TO DETERMINE AT THE TIME OF DISPOSAL OF THE PRODUCT.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

FOR OPERATIONS WHERE THE TLV MAY BE EXCEEDED. A NIOSH/MSHA APPROVED PARTICULAR RESPIRATOR OR SUPPLIED AIR RESPIRATOR IS RECOMMENDED. EQUIPMENT SELECTION DEPENDS ON CONTAMINANT TYPE AND CONCENTRATION, SELECT IN ACCORDANCE WITH 29 CFR 1910.134 AND GOOD INDUSTRIAL HYGIENE PRACTICE. FOR FIREFIGHTING, USE SELF-CONTAINED BREATHING APPARATUS.

VENTILATION

GOOD GENERAL VENTILATION (EQUIVALENT TO OUTDOORS) SHOULD BE ADEQUATE FOR NORMAL USE. FOR OPERATIONS WHERE THE TLV MAY BE EXCEEDED, MECHANICAL VENTILATION SUCH AS LOCAL EXHAUST MAY BE NEEDED TO MAINTAIN EXPOSURE LEVELS BELOW APPLICABLE LIMITS.

PROTECTIVE GLOVES

RUBBER GLOVES

EYE PROTECTION

GOGGLES AND FACE SHIELD

OTHER PROTECTIVE EQUIPMENT AND HYGIENIC PRACTICES

EYE WASH AND SAFETY SHOWER SHOULD BE AVAILABLE.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

HANDLING: DO NOT GET IN EYES. DO NOT GET ON SKIN OR CLOTHING. DO NOT TAKE INTERNALLY. AVOID BREATHING VAPORS OR FUMES. USE ONLY WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. KEEP CONTAINER CLOSED WHEN NOT IN USE. HANDLE WITH CARE. KEEP OUT OF REACH OF CHILDREN.

STORAGE: STORE IN ORIGINAL, LABELED CONTAINER.

OTHER PRECAUTIONS

CONTAINERS, EVEN EMPTY, WILL RETAIN RESIDUE AND MAY BE HARMFUL.

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

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