



Tuf-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 TUF-FLUX																	
SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION																			
HAZARDOUS COMPONENTS	CAS#	APPROX%	ACGIH-TLV	OSHA-PEL															
PETROLATUM	8009-03-8	65-75	-----	-----															
ZINC CHLORIDE	7646-86-7	20-25	1 MG/M3	1 MG/M3															
AMMONIUM CHLORIDE	12125-02-9	5-10	10 MG/M3	NONE															
<p>*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.</p>																			
SHIPPING INFORMATION		SPECIAL HAZARD DESIGNATIONS																	
NOT HAZARDOUS FOR SHIPPING PURPOSES.		<table> <thead> <tr> <th></th> <th><u>HMIS</u></th> <th><u>HAZARD RATING</u></th> </tr> </thead> <tbody> <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</td> <td></td> <td>3- SERIOUS</td> </tr> </tbody> </table>				<u>HMIS</u>	<u>HAZARD RATING</u>	HEALTH	1	0 - MINIMAL	FLAMMABILITY	0	1- SLIGHT	REACTIVITY	0	2- MODERATE	PROTECTIVE		3- SERIOUS
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PROTECTIVE		3- SERIOUS																	

EQUIPMENT

B

4- SEVERE

SECTION III - PHYSICAL DATA

APPEARANCE
TAN/GOLD

ODOR
NO
APPRECIABLE
ODOR

BOILING POINT
337Â° C

SPECIFIC GRAVITY (H2O=1)
1.06

**VAPOR PRESSURE
(mm Hg.)**
N/A

VOLATILE BY VOLUME (%)
N/A

VAPOR DENSITY (AIR=1)
>1

**EVAPORATION RATE
(BUAC=1)**
N/A

SOLUBILITY IN WATER
INSOLUBLE

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)

FLAMMABLE LIMITS

LEL

UEL

204Â° C

(PERCENT BY
VOLUME)

N/A

N/A

FIRE EXTINGUISHING MEDIA
FOAM, SAND, CO2.

SPECIAL FIRE FIGHTING PROCEDURES

IF LARGE QUANTITIES ARE INVOLVED, FIREFIGHTERS SHOULD USE
SELF-CONATINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

UNUSUAL FIRE AND EXPLOSION HAZARD

WHEN HEATED THE MATERIAL MAY RELEASE ZINC CHLORIDE AND ZINC OXIDE
FUMES.

SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTES OR ENTRY Inhalation Skin contact Eye contact Ingestion

EFFECT OF OVEREXPOSURE

INTENSE IRRITATION OF EYES.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

DERMATITIS, RESPIRATORY DISEASES, CONJUNCTIVITIS.

EMERGENCY AND FIRST AID PROCEDURES

CALL PHYSICIAN IMMEDIATELY IN ALL CASES.

EYES: FLUSH WITH WATER FOR 15 MINUTES, INCLUDING UNDER EYELIDS.

SKIN: FLUSH WITH WATER AND SOAP.

INGESTION: GIVE PLENTY OF WATER OR MILK. DO NOT INDUCE VOMITING.

INHALATION: MOVE TO FRESH AIR.

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

NONE

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

NEUTRALIZE WITH SODIUM CARBONATE OR TRI-SODIUM PHOSPHATE.

WASTE DISPOSAL METHOD

FLUSH TO CHEMICAL WASTE DISPOSAL ACCORDING TO FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

USE FUME OR AIR SUPPLIED RESPIRATOR WHEN SOLDERING IN CONFINED NON-VENTILATED SPACE.

VENTILATION

LOCAL EXHAUST DURING SOLDERING AT THE FLAME SO AS TO CAPTURE ALL GASES AND FUMES.

PROTECTIVE GLOVES

RUBBER GLOVES

EYE PROTECTION

GOGGLES AND FACE SHIELD

OTHER PROTECTIVE EQUIPMENT AND HYGIENIC PRACTICES

HEAD AND BODY PROTECTION WILL HELP TO PREVENT INJURY FROM SPLASHING, SPARKS OR FLAMES.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

FLUX IS A STABLE MATERIAL IN CLOSED CONTAINERS AT ROOM TEMPERATURE UNDER NORMAL STORAGE AND HANDLING CONDITIONS.

OTHER PRECAUTIONS

NONE

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.

Black Swan Mfg. Co. Telephone:773-227-3700 E-mail: info@blackswanmfg.com
4540 W. Thomas Street Wats:800-252-5796 Web site:<http://www.blackswanmfg.com>
Chicago, IL 60651-3318 Fax:773-227-3705