



SECTION 1 - IDENTIFICATION

Manufacturer: Black Swan Mfg. Co. 4540 W. Thomas St. Chicago, IL 60651-3318 Tel.: 800-252-5796 Fax: 773-227-3705 Web Site : www.blackswanmfg.com E-mail : info@blackswanmfg.com	For any Transportation or Medical Chemical Emergencies call: INFOTRAC (800) 535-5053 OR (352) 323-3500 24 hours per day - 7 days a week
Product Name: Super-Flux	Recommended Use: To prepare copper tubing and fittings for soldering.

SECTION 2 – HAZARD(S) IDENTIFICATION

SECTION 2 – HAZARD(S) IDENTIFICATION		
 Health Hazard  Irritant	NFPA HEALTH HAZARD 4 – Deadly 3 – Extreme Danger 2 – Hazardous 1 – Slight Hazardous 0 – Normal Material 3 1 0 SPECIFIC HAZARD Oxidizer OX Acid ACID Alkali ALK Corrosive COR Use NO WATER W Radioactive FIRE HAZARD Flash Points 4 – Below 73°F 3 – Below 100°F 2 – Above 100°F, Not exceeding 200°F 1 – Above 200°F 0 – Will not burn REACTIVITY 4 – May detonate 3 – Shock and heat may detonate 2 – Violent chemical change 1 – Unstable if heated 0 – Stable	GHS Classification Health Acute Toxicity: Not Established Skin Irritation: Cat. 1 Eye Irritation: Cat. 2A Skin Sensitization: Yes Environmental Acute Aquatic Toxicity: Not Established Chronic Aquatic Toxicity: Not Established Physical None
Signal Word Danger HMIS HEALTH3 FLAMMABILITY1 REACTIVITY0	Hazardous Statements H302: Harmful if swallowed H312: Harmful in contact with skin H315: Causes skin irritation H319: Causes serious eye irritation H331: Toxic if inhaled	Precautionary Statements P102: Keep out of reach of children P233: Keep container tightly closed P261: Avoid breathing mist and vapors P262: Do not get in eyes, on skin, or on clothing P264: Wash thoroughly after handling P271: Use in well ventilated area

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemicals	CAS#	EINECS#	REACH Pre-registration Number	Approx %
NONYL PHENOL	N/A	N/A	N/A	30-40%
ESTER	N/A	N/A	N/A	20-30%
INORGANIC ACID	N/A	N/A	N/A	1-5%
AMINE	N/A	N/A	N/A	1-5%
ETHYLAMINE	75-04-7	200-834-7	N/A	1-5%

*Unlisted ingredients are not classified as hazardous according to OSHA 1910.1200.

SECTION 4 – FIRST-AID MEASURES

Inhalation: Get immediate medical attention. Move into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and call physician. Skin: Get immediate medical attention. Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If rash or burn appears consult a physician. Eyes: Get immediate medical attention. Flush with water for 15 minutes. Remove contact lenses if present and easy to do so. If irritation persists, get medical attention. Ingestion: Get immediate medical attention. Rinse mouth. DO NOT INDUCE VOMITING.
--

GHS SAFETY DATA SHEET

SECTION 5 – FIRE-FIGHTING MEASURES

Fire Hazard: Acidic / Corrosive fumes.
Combustion Products: None known.
Extinguishing Media: Any extinguishing media.
Unsuitable Extinguishing Media: None known.
Protective Equipment: Self-contained breathing apparatus {(SCBA), MSHA/NIOSH}. Full protective gear.
Special Fire Fighting Procedures: Promptly isolate the scene by removing all persons from vicinity if there is a fire.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Do not touch or walk through spilled material. Provide adequate ventilation. Put on appropriate personal protective equipment.
Protective Equipment: Use appropriate mask or self-contained breathing apparatus.
Emergency Procedures: Remove all sources of ignition and ventilate area. For leaks, stop leak if it can be done safely. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for Cleaning Up: Small Spill-Stop leak if not risky. Move containers from spill area. Dilute with water and map up if water soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Large Spill-Stop leak if not risky. Move containers from spill area. Prevent entry to sewers, water courses, basement and confined areas. Contains and collect spillage with non-combustible, absorbent material. Dispose according to local regulations.

SECTION 7 – HANDLING AND STORAGE

Handling

Put on appropriate personal equipment. Handle only with appropriate ventilation. Wear appropriate respirator when ventilation is not adequate. Keep container closed when not in use. Do not reuse empty container, may retain product residue.

Storage

Store in a cool, dry, well-ventilated area away from incompatible materials. Keep container closed when not in use. **Incompatible Materials:** Reactive with oxidizing agents, reducing agents, metals, acids, alkalis, moisture, peroxides and chlorine.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Hazardous Chemicals</u>	<u>Exposure Limits</u>		
	<u>ACGIH-TLV</u>	<u>ACGIH-STEL</u>	<u>OSHA-PEL</u>
ETHYLAMINE	TWA 9.2 mg/m ³ - 8 hours TWA 5ppm - 8 hours	27.6 mg/m ³ - 15 minutes 15 ppm - 15 minutes	TWA: 18mg/m ³ - 8 hours TWA:10ppm - 8 hours

Engineering Controls: A source of running water to flush or wash the eyes and skin in case of contact. Use local exhaust as needed.
Ventilation: Local ventilation adequate.
Personal Protective Equipment – Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary.
Personal Protective Equipment – Skin: Chemical resistant Gloves.
Personal Protective Equipment – Eyes: Glasses/Splash goggles.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Creamy Gray Paste	Flash Point:	Not Established	Vapor Pressure:	Negligible
Odor:	Low	Specific Gravity:	Greater than 1	Flammability:	Not Established
pH:	Not Established	Solubility (H2O):	Negligible	Flammability Limits:	LEL – Not Established
Melting Point:	Not Established	Evaporation Rate:	Not Established		UEL – Not Established
Freezing Point:	Not Established	Vapor Density:	Not Established		
Boiling Point:	Not Established	VOC:	345 g/l		

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable.
Hazardous polymerization: Will not occur.
Conditions to avoid: None known.
Incompatible materials: Reactive with oxidizing agents, reducing agents, metals, acids, alkalis, moisture, peroxides and chlorine.
Hazardous decomposition products: Acidic / Corrosive fumes.

GHS SAFETY DATA SHEET

SECTION 11 – TOXICOLOGICAL INFORMATION

<u>Hazardous Chemicals</u>	<u>Toxicity</u>	<u>LD₅₀</u>	<u>LC₅₀</u>
ETHYLAMINE	Oral: 400mg/kg (rat), Dermal: 270mg/kg (rabbit)		Inhalation: 4 hours., 5540ppm (rat)
Likely Routes of Exposure: Inhalation, Skin Contact, Eye Contact and Ingestion. Symptoms and Effect - Inhalation: Toxic by inhalation. Can cause target organ damage. Irritating to the respiratory system. Exposed persons may need to be kept under medical surveillance for 48 hours. Skin Contact: Irritating to the skin. Harmful in contact with skin. This product contains material that is absorbed through skin. May cause sensitization by skin contact. Skin inflammation is characterized by itching, scaling, reddening or occasionally blistering. Prolong contact may cause dermatitis. Eye Contact: Corrosive to the eyes. Causes burns. Direct contact with the eyes can cause irreversible damage, including blindness. Ingestion: Harmful if swallowed. Corrosive to digestive tract. May cause burns to mouth, throat and stomach. Can cause target organ damage. Adverse symptoms may include the following: nausea or vomiting stomach pains. Ingestion may cause gastrointestinal irritation and diarrhea. Long-Term Effect: Prolonged skin may cause dermatitis. Prolonged contact can cause severe irritation or even burns. Pre-Existing Conditions: Individuals with pre-existing skin and digestive disorders and disorders involving any other target organ may be at risk to aggravate overexposure from this product.			

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: None known.
Persistence & Degradability: None known.
Bioaccumulative Potential: None known.
Mobility in soil: In normal use, emission of Volatile Organic Compounds (VOC's) to the air takes place, typically at a rate of 345 g/l.

SECTION 13 – DISPOSAL CONSIDERATION

Dispose of product or container in accordance with federal, state or local regulations.

SECTION 14 – TRANSPORTATION INFORMATION

D.O.T. (U.S.): Not Regulated.

SECTION 15 – REGULATORY INFORMATION

Precautionary Label Information: Toxic, Corrosive and Health Hazard.
Risk Phrases: **R22**-Harmful if swallowed. **R23**-Toxic by inhalation. **R36/37/38:** Irritating to the eyes, respiratory system and skin. **R41**-Risk of serious damage to eyes.
Safety Phrases: **S2**-Keep out of reach of children. **S9**-Keep container in a well-ventilated place. **S16**-Keep away from sources of ignition-No smoking. **S25**-Avoid contact with eyes. **S26**-In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SECTION 16 – OTHER INFORMATION

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 Mfg. 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 sheets. **DATE: 01/01/2025**