

**SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION**

**Company Address:**

8125 Cobb Center Drive  
Kennesaw, GA 30152

Product Information: 800-TECH-401  
Customer Service: 800-645-5244

Emergency: (Chemtrec) 800-424-9300  
Revision Date: April 4, 2008

**Product Identification**

**FLUX-OFF WATER SOLUBLE  
(Formerly Flux-Off II and Flux-Off NR 2000)**

**Product Code:** ES1530, ES1530CB, ES830B, ES1530C, ES1530CBC, ES830BC

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

Product Ingredient Information	CAS#	Wt. % Range
Isopropanol	67-63-0	50.0-75.0
Hexamethyldisiloxane	107-46-0	0.1-0.10
n-Propyl acetate	109-60-4	1.0-5.0
1,1-difluoroethane	75-37-6	10.0-25.0
Carbon Dioxide	124-38-9	1.0-5.0

**SECTION 3: HAZARD IDENTIFICATION**

Emergency Overview: Clear, colorless liquid with strong ethereal odor. This product is flammable. Liquid may irritate eyes and skin under repeated or prolonged exposure. Breathing high concentrations of product vapor may produce drowsiness and a headache.

Potential Health Effects:

Eyes: Liquid, aerosols and vapors of this product may be irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation.

Skin: Contact may cause skin irritation.

Ingestion: Harmful if swallowed. Irritating to mouth, throat and stomach. May cause vomiting.

Inhalation: Harmful if inhaled. High concentrations of vapors in immediate area can displace oxygen and can cause dizziness, unconsciousness, and even death with longer exposure. Keep people away from such vapors without self-contained breathing apparatus.

Pre-Existing Medical Conditions Aggravated by Exposure: Heart, lung, skin, eye.

**SECTION 4: FIRST AID MEASURES**

Eyes: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel if irritation develops or persists.

Skin: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persist. Wash clothing separately before reuse.

Ingestion: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get immediate medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**SECTION 5: FIRE FIGHTING MEASURES**

Flash Point: 53 F (12C) (TCC) LEL/UEL: Not established (% by volume in air)

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Large Spills: Shut off leak if possible and safe to do so. Wear self-contained breathing apparatus and appropriate personal protective equipment. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container for proper disposal. Do not flush to sewer. Avoid runoff into storm sewers and ditches which lead to waterways.

Small Spills: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container for proper disposal.

**SECTION 7: HANDLING AND STORAGE**

Avoid prolonged or repeated contact with eyes, skin, and clothing. Wash hands before eating. Use with adequate ventilation. Avoid breathing product vapor or mist. Do not reuse this container. Store in a cool dry place away from heat, sparks and flame. Keep container closed when not in use. Do not store in direct sunlight.

**KEEP OUT OF REACH OF CHILDREN.**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Guidelines:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	STEL / OTHER
Isopropanol	200ppm	400ppm	400ppm
n-Propyl Acetate	200ppm	200ppm	250ppm
Silicone Fluid	NA	NA	NA
1,1-difluoroethane	NA	NA	1,000 ppm (DuPont)

Work/Hygienic Practices: Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. If vapor concentration exceeds TLV, use NIOSH approved organic vapor cartridge respirator. Wear safety glasses with side shields (or goggles) and rubber or other chemically resistant gloves when handling this material.

NFPA and HMIS Codes:	NFPA	HMIS
Health	1	1
Flammability	3	3
Reactivity	1	1
Personal Protection	- B	

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Physical State: Clear, colorless liquidOdor: Sweet solventpH: NAVapor Pressure: 33 mm Hg @ 68F (Liquid)Vapor Density: >1 @ 100°F

(Air=1)

Percent Volatile: 99.5%Solubility in Water: NegligibleSpecific Gravity: (Water =1) 0.79Evaporation Rate: <1

(Butyl acetate=1)

Viscosity: 1 (Approx.)

(Water = 1)

Boiling Point: 180° F (82°C)**SECTION 10: STABILITY AND REACTIVITY**Stability - This product is stable. Conditions to Avoid: Do not spray near open flames, red hot surfaces or other sources of ignition.Incompatibility: Do not mix with powdered alkali and alkaline earth metals or strong oxidizing agents.Products of Decomposition: Thermal decomposition may release carbon monoxide, carbon dioxide and incompletely burned hydrocarbons, as well as oxides of silicone.Hazardous Polymerization: Will not occur Conditions to Avoid: NA**SECTION 11: TOXICOLOGICAL INFORMATION**Inhalation:

Isopropanol	LC50/rats	12,000 ppm/8 hrs
n-Propyl Acetate	TCLo/human	1,000 mg/m3
1,1-difluoroethane *	Rat ALC	383,000 ppm/4hrs

Skin:

n-Propyl Acetate	Rabbit	500 mg open MILD
Hexamethyldisiloxane	Rabbit LD50	16 mL/kg
Isopropanol	Rabbit	MILD

\*Information from Dupont.

Cancer Information: No ingredients listed as human carcinogens by NTP or IARC

Reproductive effects: none

Teratogenic effects: none

Mutagenic effects: none

Ingestion:

Isopropanol	LD50/rats	5,800 mg/kg
n-Propyl Acetate	LD50/rats	9,370 mg/kg
1,1-difluoroethane *	Rat ALD	>1500 mg/kg
Hexamethyldisiloxane	LDLo rat	8 mL/kg

Eye:

n-Propyl Acetate	rabbit	500 mg/24H MILD
Isopropanol	rabbit	SL-MODERATE

**SECTION 12: ECOLOGICAL INFORMATION****Environmental Impact Information**

Avoid runoff into storm sewers and ditches which lead to waterways. Water runoff can cause environmental damage.

**REPORTING**US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is: **1-800-424-8802****SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all federal, state and local regulations. Water runoff can cause environmental damage.

**SECTION 14: TRANSPORTATION INFORMATION**

Proper Shipping Name	UN Number	Class	Sub. Risk	Pkg. Group	Hazard Label	Pkg. Instr.	Max. Quantity
<u>Air:</u> Aerosols flammable n.o.s.	UN 1950	2.1	NA	NA	Flammable Gas	203 Y203	75 k.g.; 150k.g. 30 kg
<u>Ground:</u> Consumer Commodity	NA	ORM-D	NA	NA	ORM-D	Pkg. Auth.	173.306

**SECTION 15: REGULATORY INFORMATION**SECTION 313 SUPPLIER NOTIFICATION This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

This information should be included on all MSDSs copied and distributed for this material.

TOXIC SUBSTANCES CONTROL ACT (TSCA).

All ingredients of this product are listed on the TSCA Inventory.

WHMIS: Class A; Class B5; Class D2B

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**SECTION 16: OTHER INFORMATION**

Product is a Level 3 aerosol. Do not puncture or incinerate containers. Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.