

**Family Formula Repel Insect Block 18% DEET**  
**Sportsmen Formula Repel Insect Block 18% DEET**  
**Black Fly Formula Repel Insect Repellent**

**MATERIAL SAFETY DATA SHEET**

**WPC BRANDS, INC.**  
**1 Repel Road**  
**P.O. Box 198**  
**Jackson, WI 53037**

*Repel Insect Block*

**EMERGENCY NUMBER:** 1-800-255-3924

**INFORMATION NUMBER:** 1-800-558-6614

**PRODUCT NAME:** Family Formula Repel Insect Block 18% DEET  
 Sportsmen Formula Repel Insect Block 18% DEET  
 Black Fly Formula Repel Insect Repellent

**EPA REG. NO.:** 305-40

**PRODUCT CODE:** 321, 327, 315

**HMIS:** Health Hazard: 1  
 Fire Hazard: 3  
 Reactivity: 1  
 Personal Protective Equipment: B

**DATE PREPARED:** 11/7/02

**PREPARED BY:** J. Killoren

**• HAZARDOUS INGREDIENTS/IDENTITY INFORMATION •**

Material	CAS#	%	OSHA PEL	OSHA SYEL	ACGIH TLV
N,N-Diethyl Toluamide	134-62-3	17.5	N/E	N/E	N/E
Di-n-propyl Isocinchomeronate	136-45-8	2.5	N/E	N/E	N/E
N-Octyl Bicycloheptene Dicarboximide	113-38-4	5.0	N/E	N/E	N/E
Isopropyl Alcohol	67-63-0	<75.0	400 ppm	500ppm	400 ppm

\* N/E = NOT ESTABLISHED

**• HEALTH HAZARDS •**

**Acute Inhalation:** Slight irritation to respiratory passages. Breathing of vapor may cause dizziness. Inhalation of higher concentrations may cause headaches, nausea, coma, and other central nervous system effects, including death.

**Eye Contact:** Eye irritant; may severely irritate or damage the eyes and cause corneal burns. Causes substantial but temporary eye injury.

**Skin Contact:** Can cause irritation and redness of skin, especially on areas occluded from air. Prolong exposure may result in temporary dermatitis. Do not apply to severely burned or damaged skin.

**Ingestion:** Harmful if swallowed. Swallowing large amounts causes headaches, nausea, vomiting, stomach cramps, diarrhea and perhaps unconsciousness. Ingestion of ethyl alcohol may be fatal. Small amounts aspirated into respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury possibly progressing to death.

**Systemic & Other Effects:** May cause CNS disturbances. There have been a handful of isolated cases of adverse systemic effects associated with excessive exposure to DEET. Most of these have involved longterm high dosage use of DEET on children.

**Medical Conditions Aggravated by Exposure:** Persons with pre-existing skin disorder, eye problems or impaired respiratory function may be more susceptible to the effects of this substance.

**Chemicals Listed as Carcinogens or Potential Carcinogens (NTP, IARC or OSHA):** None

**Family Formula Repel Insect Block 18% DEET**  
**Sportsmen Formula Repel Insect Block 18% DEET**  
**Black Fly Formula Repel Insect Repellent**

Page 2 of 3

**COMMENTS:** Unnecessary exposure to this product, or any chemical, should be avoided. For external use only; do not ingest.

**EMERGENCY FIRST AID PROCEDURES:**

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration and seek medical attention immediately. Administer oxygen by trained personnel if difficulty in breathing.

**Skin:** Wash with soap and water. If irritation persists, seek medical attention.

**Eyes:** Immediately flush eyes with a steady stream of water for 15 minutes. If irritation persists, seek medical attention.

**Oral:** Contact Poison Control Center. Do not induce vomiting.

**• TOXICOLOGY INFORMATION •**

The following toxicological studies have been completed on a product very similar to this, using the US Environmental Protection Agency protocols.

<u>STUDY</u>	<u>RESULT</u>	<u>EPA TOX CATEGORY</u>
Acute Oral Toxicity	LD <sub>50</sub> between 1.0 and 5.0 g/kg	III
Acute Dermal Toxicity	LD <sub>50</sub> greater than 5000 mg/kg	IV
Acute Inhalation Toxicity	LC <sub>50</sub> greater than 2.04 mg/l	IV
Primary Eye Irritation	Irritant	II
Primary Skin Irritation	Minimal Irritation	IV
Dermal Sensitization	Non a sensitizer	

**• PHYSICAL/CHEMICAL CHARACTERISTICS •**

**BOILING POINT:** N/A

**SPECIFIC GRAVITY:** 0.804

**VAPOR PRESSURE:** N/A

**PERCENT VOLATILE BY VOLUME:** N/A

**EVAPORATION RATE:** 2.88 for Alcohol

**SOLUBILITY IN WATER:** Partial

**APPEARANCE AND ODOR:** Clear concentrate with the odor of alcohol. Family formula with odor of floral perfume.

**• REACTIVITY DATA •**

**STABILITY:** Stable

**INCOMPATIBILITY (Material to Avoid):** Strong oxidizing agents, halogens and aldehydes. Strong acids and bases may cause hydrolysis. May soften or damage some synthetic fabrics such as Rayon. May damage leather, plastics, painted and varnished surfaces.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION:** Products of combustion are principally carbon dioxide, carbon monoxide and water.

**CONDITIONS TO AVOID:** Do not store above 130°F. Do not store near open flame.

**• FIRE AND EXPLOSION HAZARDS •**

**FLASH POINT:** 66°F (TCC)

**AUTOIGNITION:** N/A

**FLAMMABILITY LIMITS IN AIR, % BY VOL.:** Upper and Lower, Not Established.

**EXTINGUISHING MEDIA:** Dry chemical or carbon dioxide. For large fires, use alcohol-type foam extinguisher.

**Family Formula Repel Insect Block 18% DEET**  
**Sportsmen Formula Repel Insect Block 18% DEET**  
**Black Fly Formula Repel Insect Repellent**

Page 3 of 3

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** At elevated temperatures (over 54°C/130°F), containers may vent, rupture or burst.

**SPECIAL FIRE FIGHTING PROCEDURES:** Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving chemicals. Use protective shielding to avoid exploding containers.

• **PRECAUTIONS FOR SAFE HANDLING AND USE** •

**SPILL RESPONSE:** Remove ignition sources. Use absorbent material to collect and contain for salvage or disposal. Avoid breathing vapors.

**WASTE DISPOSAL:** Do not contaminate water, food or feed by storage and disposal. If empty: Do not reuse this container. Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency (or 1-800-CLEANUP) for disposal instructions. Never place unused product down any indoor or outdoor drain.

**HANDLING AND STORING PRECAUTIONS:** Do not spray in eyes. Avoid excess inhalation. Do not take internally. Store in a dry location at room temperature away from fire, flame or sparks.

**OTHER PRECAUTIONS:** Keep out of reach of children. Use proper protection. Wash hands after handling material. Good practice requires that gross amounts of any chemical be removed from the skin as soon as practical, especially before eating or smoking.

• **CONTROL MEASURES** •

**RESPIRATORY PROTECTION:** No respiratory protection needed when used in according to directions.

**VENTILATION:** Use only in a well ventilated area.

**PROTECTIVE EQUIPMENT:** None required with normal use. Keep out of eyes.

**SKIN:** Do not expose treated skin to fire, sparks or flame until liquid has evaporated.

**EMERGENCY NUMBER:** 1-800-255-3924

**COMMENTS:** Use only at normal room temperature. Do not apply towards face. Wash with soap and water after use.

• **SPECIAL PRECAUTIONS** •

**HANDLING AND STORAGE:** Do not store above 130°F. Do not store near open flames.

**OTHER PRECAUTIONS:** Read and follow directions on product label.

• **TRANSPORT INFORMATION** •

DOT (Department of Transportation) 49CFR Part 172.101

Proper Shipping Name: Consumer Commodity

ID No: N/A

Hazard Class: ORM-D

Packing Group: N/A

Label: N/A

Air Transportation limited quantities: 30 kg (66 lbs.) gross

Bulk Product

Proper Shipping Name: Flammable Liquids, N.O.S.

ID No: UN 1993

Hazard Class: 3

Packing Group: II

Label: Flammable Liquid

**NOTE:** This data represents typical values, not product specifications. No guarantee of accuracy or completeness is made. No responsibility is assumed for any kind of loss or damages arising from use of this data. The aforementioned effects are based on the evaluation of individual components and the relevancy to the product as a whole is unknown.