

Material Safety Data Sheet

Date last revised: 4 February 4, 2009

I. General Information

Active Ingredient(s) d-Phenothrin (SUMITHRIN®); Piperonyl Butoxide	Trade Name & Synonyms ANVIL® 2+2 ULV
Product Description A mosquito control insecticide for outdoor residential and recreational areas	EPA Registration Number 1021-1687-8329
Proper Shipping Name (DOT, ICAO/IATA) Insecticides, Insect or Animal Repellent, Liquid, N.O.S.	Primary Hazard Classification/Division (DOT, ICAO/IATA) Non-Hazardous
Manufacturer Clarke Mosquito Control Products, Inc.	Manufacturer's Phone Number (630) 894-2000
Manufacturer's Address 159 North Garden Avenue Roselle, Illinois 60172	INFOTRAC (Transportation/Spill Emergency) 1-800-553-5053 Medical Emergency or Incident 1-888-740-8712

II. Composition / Ingredients

Chemical Name	CAS #	Exposure Limits	Wt. %
d-Phenothrin (SUMITHRIN®)	026002-80-2	None	2
Piperonyl Butoxide	000051-03-6	None	2
Petroleum Distillates		200 mg/m ³ [1]	25-50%
Mineral Oil		5 mg/m ³ [2]	50-75%

[1] ACGIH TLV, TWA, skin exposure

[2] OSHA PEL/ACGIH TLV, TWA, oil mist

COMMENTS: Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

III. Hazards Identification

Physical State: liquid **Color:** colorless **Odor:** mineral oil

CAUTION! Harmful if absorbed through the skin. Contains petroleum distillate – Vomiting may cause aspiration pneumonia. Avoid contact with skin, eyes, and clothing.

Signs and Symptoms of Acute Exposure

Eye contact May cause temporary eye irritation, tearing, and blurred vision. Irritation clearing within 48 hours.

Skin contact Can cause mild skin irritation (irritation index 0.04). No irritation noted at 72 hours. Can cause a burning or prickling sensation on more sensitive areas (face, eyes, mouth). Harmful if absorbed through the skin. Not a dermal sensitizer.

Ingestion May be harmful if swallowed. Product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe lung injury.

Inhalation No significant adverse health effects are expected to occur upon short-term exposure.

Chronic effects No significant signs or symptoms indicative of any adverse health effects are expected to occur.

Conditions aggravated by exposure None known

Target organs None

Toxicological Information: Acute Dermal LD50: > 2.0 gm/kg (Albino rabbit)

Oral LD50: > 5.0 gm/kg (Albino rat)

Inhalation LC50: 3.76 mg/L (4 hr, rat)

Carcinogenic potential None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

Marginally higher incidences of benign liver tumors in mice were observed following lifetime high dose exposures to piperonyl butoxide (PBO). The significance of these observations is questionable and under review. The doses at which tumors were observed for PBO greatly exceeded potential human exposure from labeled uses. Doses at which these effects were observed greatly exceed anticipated human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that this product will result in carcinogenic effects.

Material Safety Data Sheet

Date last revised: 4 February, 2009

ANVIL 2+2 ULV

Page 2 of 3

IV. First Aid Measures

EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

INGESTION: If swallowed, immediately call a poison control center or doctor for treatment advice. DO NOT give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to an unconscious person.

INHALATION: Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN: Contains Pyrethroids and Petroleum Distillates; vomiting may pose an aspiration pneumonia hazard. For skin effects, a highly efficient therapeutic agent for pyrethroid exposure is topical application of Tocopherol Acetate (Vitamin E).

V. Fire Fighting Measures

Flammability Classification: This product is NOT classified as flammable or combustible by OSHA.

Flash Point (Test Method): >200 °F, >93.3 °C (TAG Closed Cup)

Hazardous combustion products: Carbon dioxide, carbon monoxide, smoke, fumes, and unburned hydrocarbons

Hazardous Combustion Products: Under fire conditions this product may support combustion and may decompose to give off toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides.

Extinguishing Media: Foam, carbon dioxide or dry chemical.

Fire Fighting Procedures: Treat as an oil fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water stream.

Sensitive to Static Discharge: Yes, use proper bonding and/or grounding procedures.

VI. Physical and Chemical Properties

Appearance: Clear, colorless liquid

Odor: odor of mineral oil

Specific Gravity (H₂O = 1): 0.850 at 20 °C

Vapor Density (Air = 1): heavier than air

Melting/Freezing point: Not determined

(VOC): <1.000%

Solubility in Water: Immiscible in water

pH: Not applicable

Viscosity #1: 15.5 CPS at 24 °C (Brookfield)

Density: 7.10 Lbs/Gal

VII. Stability and Reactivity

Stable Yes

Hazardous Polymerization No

Conditions to Avoid Not compatible with strong acids or bases. Not compatible with strong oxidizers.

VIII. Accidental Release Measures

Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors.

Small Spill Absorb with appropriate absorbent such as sand or vermiculate. Clean spill area of residues and absorbent.

Large Spill Collect product into drums, storage tanks, etc., via drains, pumps, etc. Absorb with appropriate absorbent such as sand or vermiculate. Clean spill area of residues and absorbent.

Environmental Precautions: Water Spill: Contains pyrethroids which are toxic to fish and other aquatic invertebrates. Contaminated absorbent and wash water should be disposed of according to local, state/provincial and federal/national regulations.

IX. Handling and Storage

General Procedures: Do not use or store near heat, sparks, open flame, or any other ignition sources.

Handling: Take prudent precautions to avoid contact with skin, eyes, and clothing. Mechanical ventilation should be used when handling this product in enclosed spaces. Do not contaminate water, food or feedstuffs, by storage, handling, or by

Material Safety Data Sheet

Date last revised: 4 February, 2009

ANVIL 2+2 ULV
Page 3 of 3

disposal. Read and observe all precautions and instructions on the label.

Storage: Store in a cool, dry place. Keep container closed. KEEP OUT OF REACH OF CHILDREN.

Electrostatic Accumulation Hazard: This product contains petroleum distillates for which there is potential for the accumulation of static electricity. Consideration should be given to bonding and grounding of equipment during loading, unloading, and transfer of this product.

Disposal Method: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Empty Container: Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of container in a sanitary landfill, or by other procedures approved by State and Local authorities.

RCRA/EPA Waste Information: None of the ingredients in this product appear on RCRA lists (40 CFR 261.24, 40 CFR 251.33) or CERCLA Hazardous Substance list (40 CFR Part 302 Table 302.4).

X. Exposure Controls / Personal Protection

Engineering Controls: Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.

Personal Protective Equipment: Personal protective equipment should be selected based upon the conditions under which this material is used.

Eyes and Face: Take prudent precautions to avoid contact with eyes.

Skin: Take prudent precautions to avoid contact with skin and clothing.

Work Hygienic Practices: DO NOT SMOKE, EAT, OR DRINK, OR APPLY COSMETICS IN WORK AREA! Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking, or using the toilet.

XI. Other Regulatory Information

TSCA Inventory All chemical substances in this product comply with the TSCA inventory reporting requirements.

SARA Title III

Section 311/312 Hazard Categories:

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes

Section 302/304 Extremely Hazardous Substances: None

Section 313 – Reportable Ingredients:

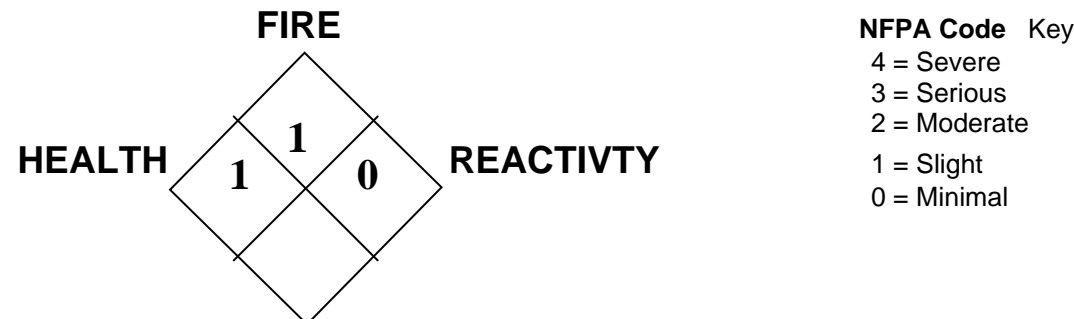
Sumithrin (d-Phenothrin), 026002-80-2, 2.00 wt%
Piperonyl butoxide, 000051-03-6, 2.00 wt%

DOT (Department of Transportation): This material is not regulated by the DOT as a hazardous material when shipped in Non-Bulk quantities (i.e., less than 119 Gal / 450 Liter).

US States Regulatory Reporting

CA Prop 65: This product is not known to contain any substances known to the State of California to cause cancer, birth defects, or other reproductive harm.

Volatile Organic Compounds (VOC): This product contains less than 1% VOC.



The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.