


**1. Identification**

<b>Product Name:</b>	Insect Shield Permethrin Insect Repellent for Clothing & Gear	<b>EMERGENCY CONTACT INFORMATION:</b>	
<b>EPA Registration #:</b>	1021-1746-74843	<b>Domestic Contact #:</b>	866.712.7110
<b>Product Use/Description:</b>	A Liquefied Aerosol Insecticide Spray	<b>International Contact #:</b>	+1.336.272.4157
<b>Manufacturer:</b>	Insect Shield, LLC	<b>Health or Spill#:</b>	CHEMTREC - 1.800.424.9300
<b>Street Address/City/State:</b>	814 W Market, Greensboro, NC 27401		
<b>Company Contact #:</b>	336.272.4157		

**2. Hazards(s) Identification**

<b>Hazard Classification:</b>	This chemical is considered hazardous by the 2012 Hazard Communication Standard (29 CFR 1910.1200)	<b>Appearance:</b>	Milky white / Milky yellow (Aerosol Non-volatiles)
<b>Physical state:</b>	Aerosol - Compressed liquefied gas	<b>Odor:</b>	Solvent
<b>Signal Word:</b>	"WARNING"	<b>GHS Hazard Pictograms:</b>	
<b>Precautionary Statement - Hazard:</b>	<p>H3332 - Harmful if inhaled                      H317 - May cause an allergic skin reaction                      H400 - Very toxic to aquatic life                      H410 - Very toxic to aquatic life with long lasting effects                      H223 - Flammable aerosol                      H280 - Contains gas under pressure; may explode if heated</p>		
<b>Precautionary Statement - Prevention:</b>	<p>P210 - Keep away from heat/sparks/open flames/hot surfaces - No smoking                      P211 - Do no spray on an open flame or other ignition source                      P251 - Pressurized container: Do not pierce or burn, even after use                      P261 - Avoid breathing dust/fume/gas/mist/vapors/spray                      P264 - Wash face, hands and any exposed skin thoroughly after handling                      P271 - Use only outdoors or in a well-ventilated area                      P272 - Contaminated work clothing should not be allowed out of the workplace                      P280 - Wear protective gloves/protective clothing/eye protection/face protection</p>		
<b>Precautionary Statement - Response:</b>	<p>P321 - Specific treatment (see Section 4/ First Aid)                      P302 + P352 - IF ON SKIN: Wash with plenty of soap and water                      P362 - Take off contaminated clothing and wash before reuse                      P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention                      P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing                      P312 - Call a POISON CENTER or doctor/physician if you feel unwell                      P370 + P378 - In case of fire: Use CO2, dry chemical, or foam for extinction</p>		
<b>Precautionary Statement - Storage:</b>	<p>P410 +P403 - Protect from sunlight. Store in a well-ventilated place                      P411 - Do not expose to temperatures exceeding 50 degrees C/122 degrees F</p>		
<b>Precautionary Statement - Disposal:</b>	<p>P501 - Dispose of contents/container to an approved waste disposal plant</p>		
<b>Hazards not otherwise classified (HNOC):</b>	<p>Do not use this product in or on electrical equipment due to the possibility of shock hazard</p>		

**3. Composition/Information on Ingredients**

<b>Chemical Name:</b>	Mixture; active ingredient, permethrin
<b>Component / CAS Number / %:</b>	Permethrin / 52645-53-1 / 0.50% Petroleum distillates, hydrotreated light / 64742-47-8 / < 10* Propane / 74-98-6 / 1<-->2* Isobutane / 75-28-5 / 5<-->10*
<b>Comments:</b>	* The exact percentage (concentration) of composition has been withheld as a trade secret. Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

**4. First-aid Measures**

<b>Aspiration pneumonia hazard:</b>	No information available
<b>Description of first aid measures:</b>	
<b>Eye contact:</b>	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.
<b>Skin contact:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center doctor for treatment advice.
<b>Ingestion:</b>	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 a 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.

**Self-protection of the First Responder:** Remove all sources of ignition. Use personal protective equipment as required.

**Note to Physician:** For skin effects, a highly efficient therapeutic agent for Pyrethrin/Pyrethroid exposure is topical application of tocopherol acetate (Vitamin E).

**5. Fire-fighting Measure**

**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** Caution: Use of water spray when fighting fire may be inefficient

**Hazardous combustion products:** Hydrogen chloride, Carbon monoxide, Carbon dioxide (CO<sub>2</sub>)

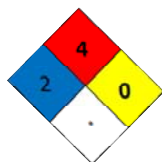
**Special hazards arising from the chemical:** No information available

**Explosion Data:** Sensitivity to Mechanical Impact - None

Sensitivity to Static Discharge - None

**Protective equipment and precautions for firefighters:** In the event of fire and/or explosion do not breathe fumes

**NFPA Labeling:**



**Chronic Hazard Star Legend** \* = Chronic Health Hazard

**6. Accidental Release Measures**

**Personal & Environmental precautions:**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required.

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See section 12 for additional ecological information.

**Methods for Containment & Clean-up:**

**Containment:** Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

**Cleaning up:** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up transfer to properly labeled containers. Soak up with inert absorbent material.

**7. Handling and Storage**

**Precautions for safe handling:**

Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e. pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use the local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. For more information, see product label.

**Storage Conditions:** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly cool, well-ventilated place. For more information, see product label.

**8. Exposure Controls/Personal Protection**

**Exposure Guidelines:** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Supplier OEL
Petroleum distillates, hydrotreated light 64742-47-8	-	-	-	TWA: 100 ppm TWA: 525 mg/m <sup>3</sup>
Propane 74-98-6	TWA: 1000 ppm	TWA: 1000 pp, TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 1000 mg/m <sup>3</sup> (vacated) TWA: 1800 mg/m <sup>3</sup>	IDLH: 2100 PPM TWA: 1000 PPM TWA: 1800 MG/M <sup>3</sup>	-
Isobutane 75-28-5	STEL: 1000 PPM	-	TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>	-

*NIOSH IDLH Immediately Dangerous to Life or Health*

**Other Information:** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v OSHA, 965 F.2nd 962 (11th Cir., 1992)

**Engineering Controls:** Safety showers, Eyewash stations, Ventilation systems

**Eye/Face Protection:** Tight sealing safety goggles. Face protection shield.

**Skin Protection:** Wear protective gloves and protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Work/Hygienic Practices:** When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

**9. Physical and Chemical Properties**

<b>Physical State:</b>	Aerosol - Compressed liquefied gas	<b>Partition Coefficient:</b>	no information available
<b>Color:</b>	Milky white / Milky yellow (Aerosol Non-volatiles)	<b>Specific Gravity:</b>	0.9748 (Aerosol Non-volatiles) @ 20 C(68 F)
<b>Odor:</b>	Solvent	<b>Evaporation Rate:</b>	no information available
<b>Odor Threshold:</b>	no information available	<b>Vapor Pressure:</b>	no information available
<b>pH:</b>	6.8 / Test was performed on aerosol non-volatile's	<b>Vapor Density:</b>	no information available
<b>Melting Point:</b>	no information available	<b>Miscibility / Solubility:</b>	
<b>Boiling Point:</b>	no information available	<b>Water</b>	Partially miscible
<b>Flash Point:</b>	>93.3 C / > 200.00 F - TCC	<b>Alcohol</b>	Miscible
<b>Flammability:</b>	no information available	<b>Aromatic solvents:</b>	Immiscible
<b>Explosive Limits:</b>	no information available	<b>Petroleum distillates:</b>	Immiscible
<b>VOC Content (%)</b>	13.9	<b>Dynamic viscosity:</b>	4.5 cPs @ 23.0 C

**10. Stability and Reactivity**

<b>Reactivity:</b>	No data available
<b>Chemical stability:</b>	Stable under recommend storage conditions
<b>Possibility of hazardous reactions:</b>	None under normal processing - Hazardous polymerization does not occur.
<b>Conditions to avoid:</b>	Heat, flames and sparks
<b>Incompatibility:</b>	Incompatible with strong acids and bases. Incompatible with oxidizing agents.
<b>Hazardous Decomposition Products:</b>	Hydrogen chloride, Carbon monoxide, Carbon dioxide (CO2)

**11. Toxicological Information**

<b>Oral LD50:</b>	>5,000 mg/kg (rat)
<b>Dermal LD50:</b>	>5,000 mg/kg (rabbit)
<b>Inhalation LC50:</b>	4-hour > 2.03 mg/L (rat)
<b>Skin:</b>	
<b>Irritation:</b>	Index: 3.7
<b>Skin contact:</b>	Moderate irritation at 72 hours (rabbit)
<b>Sensitization:</b>	Positive (guinea pig)
<b>Eye:</b>	Irritation clearing in 48 hours (rabbit)
<b>Carcinogenicity:</b>	Product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, or NTP
<b>Chronic toxicity:</b>	Avoid repeated exposure
<b>Target Organ Effects:</b>	Central nervous system

**12. Ecological Information**

<b>Ecotoxicity:</b>	
<b>Persistence and degradability:</b>	no information available
<b>Bioaccumulation:</b>	no information available

<u>Chemical Name</u>	<u>Partition coefficient: n-Octanol/Water:</u>
Permethrin / 52645-53-1	6.5
Propane / 74-98-6	2.3
Isobutane / 75-28-5	2.88

**Environmental Precautions:** Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

**13. Disposal Considerations**

<b>Disposal of wastes:</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations. For more information, see product label.
<b>Contaminated packaging:</b>	For more information, see product label

**14. Transportation Information**

<b>DOT / Air / Vessel</b>	
<b>US DOT:</b>	UN1950
<b>Proper Shipping Name:</b>	Aerosols, non-flammable
<b>Hazard Class:</b>	2.2

**15. Regulatory Information**

<b>California Proposition 65:</b>	This product does not contain any Proposition 65 chemicals
<b>EPA Registration Number:</b>	74843-3-1021
<b>SARA 313:</b>	
	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
<b>SARA311/312 Hazard Categories:</b>	Acute Health Hazard - No Chronic Health Hazard - Yes Fire Hazard - No Sudden release of Pressure Hazard - Yes Reactive Hazard - No

**CWA (Clean Water Act):** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA:** This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**International Regulation:**

<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory	Complies
<b>DSL/NDSL</b> - Canadian Domestic Substances List/Non-Domestic Substances List	Does not comply
<b>EINECS/ELINCS</b> - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances	Complies
<b>ENCS</b> - Japan Existing and New Chemical Substances	Complies
<b>IECSC</b> - China Inventory of Existing Chemical Substances	Complies
<b>KECL</b> - Korean Existing Chemical Substances	Complies
<b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances	Complies
<b>AICS</b> - Australian Inventory of Chemical Substances	Complies

**SDS and EPA (FIFRA) Pesticide Label Differences:** This chemical is a pesticide product registered by the United States EPA and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for Safety Data Sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use. The hazard information required on the pesticide label is reproduced below.:

**Signal Word:** CAUTION

**Precautionary Statements:** Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals

**16. Other Information**

**Date of Issue:** 10-Mar-2017  
**Revision Date:** 10-Mar-2017

**HMIS Labeling:**

HEALTH	2*
FLAMMABILITY	4
REACTIVITY	0
PERSONAL PROTECTION	X

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**Disclaimer:** This information is supplied under the OSHA Hazardous Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. Or statements herein, however, are not to be taken as a warranty or representation for which Insect Shield, LLC assumes legal responsibility.

**End of Safety Data Sheet**