SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product Name: PERMASEASE® 3-15

Description: Insecticide for control of adult mosquitoes, biting and non-biting midges, and blackflies

EPA Reg. No.: 86291-4-96263

Company Identification:

ADAPCO LLC.

550 Aero Lane

Sanford, FL 32725

Emergency Response Telephone Numbers

For Spills Call: 1-(800)-424-9300

For Medical Emergencies Call: 1-(866)-897-8050

SECTION 2: HAZARD IDENTIFICATION

United States (US)

According to OSHA 29 CFR 1910.1200 HSC (2012)

Classification of the Substance or Mixture

Aspiration Hazard: Category 1

Acute Toxicity (Inhalation): Category 4





Signal Word: Danger

Hazard Statements

May be fatal if swallowed and enters airways. Harmful if inhaled

Precautionary Statements

Prevention: Avoid breathing mist/spray. Use only outdoors or in a

well-ventilated area.

Response: If swallowed: Immediately call a poison control center

or doctor. Do NOT induce vomiting.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a Poison center or doctor if you feel unwell.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance

with local/regional/national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:	CAS NO.	<u>(% w/w)</u>	
Permethrin	52645-53-1	3.0%	
Piperonyl Butoxide	51-03-6	15.0%	
Aliphatic Petroleum Distillate	64741-89-5	82.0%	

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SECTION 4: FIRST AID MEASURES

FIRST AID

• Call a poison control center or doctor immediately for treatment advice. If swallowed

• Do not induce vomiting unless told to by a poison control center or doctor.

• Do not give anything by mouth to an unconscious person.

Take off contaminated clothing.

If on skin or clothing

If inhaled

Rinse skin immediately with plenty of water for 15-20 minutes.

Call a poison control center or doctor for treatment advice.

· Move person to fresh air.

• If person is not breathing, call 911 or an ambulance, then give artificial

respiration, preferably by mouth-to mouth, if possible. Call a poison control center or doctor for treatment advice.

• Hold eye open and rinse slowly and gently with water for 15-20 minutes. If in eyes

• Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye.

• Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Hotline Number: You may also contact SafetyCall® International (866) 897-8050 for emergency medical treatment information.

Note to Physician: Contains petroleum distillate-vomiting may cause aspiration hazard.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: 214° F

Extinguishing Media: Foam, Carbon Dioxide (CO₂), or dry chemical is preferred.

Fire & Explosion Precautions: Foam fire-extinguishing system is preferred because

uncontrolled water can spread possible contamination. Do not allow fire-fighting water to escape into waterways

or sewers. Toxic irritating gases can be formed.

Fire-Fighting Equipment: Use positive-pressure self-contained breathing apparatus

and full protective equipment.

Hazardous Decomposition: Under fire conditions hydrogen chloride, oxides of chlorine, carbon

dioxide, carbon monoxide, and asphyxiants can be formed.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Use appropriate protection (see Section 8)

Environmental Precautions: Prevent product from entering into drains and waterways. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Collect and dispose of this material and its container in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. See Section 12 for additional ecological information.

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Clean Up Methods: Soak up with absorbent, non-combustible material, such as sand, silica gel, clay, or sawdust, while using appropriate personal protection equipment. Collect material in appropriate container for disposal.

SECTION 7: HANDLING AND STORAGE

Keep out of reach of children. Do not contaminate water, food or feed by storage or disposal. Do not use, pour, spill or store near heat or open flame.

Skin Protection: While using or handling this product wear long sleeved shirt and long pants, socks, and shoes. Contaminated leather articles, such as shoes, belts, and watchbands, should be removed and destroyed. Launder all work clothing before reuse. Keep work clothing separated from household laundry.

Special Precautions for Handling and Storage: See product label. Harmful if swallowed, inhaled, or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Remove contaminated clothing and wash clothing before reuse.

Store product in its original labeled container in a cool, dry, locked place designated for such insecticides and out of reach of children. In case of spillage, soak up with absorbent material such as sawdust, or fuller's earth; sweep up and place in a labeled container and dispose of as follows.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

Control Parameters

Component Name	CAS No.	List/Source	Type	Value
Permethrin	52645-53-1	ACGIH	TWA	5 mg/m ³
		NIOSH OSHA	REL PEL	5 mg/m³ 5 mg/m³
Mineral Oil	64741-89-5	ACGIH NIOSH OSHA	TLV REL PEL	5 mg/m³ inhalable fraction 5 mg/m³ form: mist 5 mg/m³

Engineering Controls: Use with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Wash hands thoroughly after handling. Wash clothing before re-using.

Individual Protection Measures (Personal Protection Equipment)

Eye Protection: Safety Glasses, Goggles or Face Shield

Skin Protection: Wear suitable protective clothing including long-sleeve shirt, long pants, shoes, and socks. Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron.

Hand Protection: Protective glove selection must be based on the user's assessment of the workplace hazards. Suitable protective chemical resistant materials include barrier laminate, nitrile, neoprene, or Viton.

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Respiratory Protection: Not usually required. In instances where exposure limits are exceeded, wear a NIOSH-approved pesticide respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color: Very Light Yellow, Gardner 2

Physical State: Liquid

Odor: Very Faint Chemical Odor Density: 0.855 g/cc @ 24° C

Flash Point: 214° F

Solubility: Does not disperse in water Viscosity: 3.73 CPS @ 24° C

pH: 4.92 (1% dispersion)

Stability: Stable

SECTION 10: STABILITY AND REACTIVITY

Stability: (CONDITIONS TO AVOID) Avoid heating above 214° F

Contains a petroleum distillate solvent which can burn.

Incompatibility: (SPECIFIC MATERIALS TO AVOID) Strong Oxidizers.

Hazardous Decomposition: Under fire conditions hydrogen chloride, oxides of chlorine, carbon

dioxide, carbon monoxide, and asphyxiants can be formed.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation: May be harmful if inhaled

Ingestion: May be fatal if swallowed and enters airways due to petroleum distillate. Vomiting may cause

aspiration pneumonia.

Toxicological Effects

Acute Toxicity/Effects

 Oral, Rat LD50
 > 5,000 mg/kg-bw

 Dermal, Rat LD50
 > 2,000 mg/kg-bw

Inhalation, Rat LC50 > 3.9 mg/L

Skin Corrosion/Irritation: Not corrosive or irritating to the skin on acute exposure. Mild skin

irritation or cracking may occur from prolonged or repeated exposure to

this product.

Serious Eye Damage

/Irritation:

Mild (transient) eye irritation may occur from direct exposure of the

product in the eyes.

Skin Sensitization: Not a skin sensitizer

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Single exposure: No data is available to indicate product or any components present at

greater than 0.1% present a specific target organ toxicity hazard from

single exposure.

Germ Cell Mutagenicity This product has not been tested. No data is available to indicate product or

any components present at greater than 0.1% are mutagenic or genotoxic. For permethrin and for piperonyl butoxide, no mutagenic effect was found in various

tests with microorganisms and mammalian cell culture.

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as

listed by OSHA, IARC or NTP. Permethrin and Piperonyl Butoxide are

classified by IARC as Group 3: Not classifiable as to carcinogenicity to humans.

Permethrin caused at high dose levels an increased incidence of tumors in mice in the following organ(s): liver, Lungs. The mechanism that triggers tumors in rodents is not relevant for the low exposures encountered under normal use conditions. Piperonyl butoxide was not carcinogenic in lifetime feeding studies

in rats and mice.

Reproductive Effects: No data is available to indicate product or any components present at greater

than 0.1% cause reproductive or teratogenic toxicity. Permethrin did not cause reproductive toxicity in a two-generation study in rats. Piperonyl butoxide did

not cause reproductive toxicity in a two-generation study in rats.

STOT – Repeated exposure No data is available to indicate product or any components present at greater

than 0.1% present a specific target organ toxicity hazard from repeat exposure Permethrin did not cause specific target organ toxicity in experimental animal studies. Piperonyl butoxide did not cause specific target organ toxicity in

experimental animal studies.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Product specific data is not available. Data referenced is in relation to the active ingredients, Permethrin and Piperonyl Butoxide.

Toxicity to Fish: Permethrin: 96-hr Acute LC50 0.79 ppb, Bluegill Sunfish (*Lepomis*

macrochirus)

Piperonyl Butoxide: 96-hr Acute LC50 6.12 ppm, Rainbow Trout

(Oncorhynchus mykiss)

Toxicity to Aquatic Invertebrates: Permethrin: 96-hr LC50 0.019 ppb, Mysid Shrimp (*Americamysis bahia*)

Piperonyl Butoxide: 96-hr LC50 0.49 ppm, Mysid Shrimp

(Americamysis bahia)

Toxicity to Aquatic Plants: Permethrin: 72-hr EC50 0.5 mg/L, Algae

Piperonyl Butoxide: 72-hr EC50 > 9.1 mg/L, Algae

Persistence and Degradability Product specific data not available. Data referenced is in relation to the

active ingredients, Permethrin and Piperonyl Butoxide.

Biodegradability: Not rapidly biodegradable.

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Partition Coefficient, Koc: Permethrin: 100,000

Piperonyl Butoxide: 399 - 830

Bioaccumulation: Bioconcentration (BCF) Permethrin: 300

Bioconcentration (BCF) Piperonyl Butoxide: 2,175

Mobility in Soil: Permethrin: Immobile in soil

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment and Disposal methods

Pesticide wastes are regulated. Consult product label for chemical substance and container disposal instructions. Avoid release to the environment. Improper disposal of excess product or rinsate is a violation of Federal law. If these wastes cannot be disposed or by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA regional office for guidance.

Container disposal: Rinse thoroughly in accordance with label instructions.

SECTION 14: TRANSPORTATION INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number 3082
Class 9
Packing group III
Marine Pollutant YES

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(PERMETHRIN, PIPERONYL BUTOXIDE SOLUTION)

IATA

UN number 3082
Class 9
Packing group III
Marine Pollutant YES

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(PERMETHRIN, PIPERONYL BUTOXIDE SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variances due to package size or special transportation.

Freight Classification INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON

SECTION 15: REGULATORY INFORMATION

FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency 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, and for the workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

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CAUTION: Harmful if swallowed, inhaled, or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. While using or handling this product wear long sleeved shirt and long pants, socks, and shoes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Remove contaminated clothing and wash clothing before reuse.

Other Federal Regulations

SARA Title III Classification

Section 302: None

Section 311/312: Immediate (acute) hazard

Section 313: This product contains the following toxic chemicals subject to the reporting

requirements of section 313 of Title III of the Superfund Amendments and

Reauthorization Act of 1986 and 40 CFR Part 372
Permethrin CAS# 52645-53-1 3.0%
Piperonyl Butoxide CAS# 51-03-6 15.0%

CERCLA RQ: None

OSHA Hazard Communication Standard: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. California Proposition 65: Not listed

State Right-To-Know: National, state, provincial or local emergency planning, community right-to-know or other laws, regulations or ordinances may be applicable--consult applicable national, state, provincial or local laws

SECTION 16: OTHER INFORMATION

SDS Date: August 18, 2020

This document is prepared pursuant to the OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012. In addition, other substances not "Hazardous" per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state, and local laws and regulations. See SDS for health and safety information.