



PERMANONE® READY-TO-USE INSECTICIDE

MSDS Version 1.0

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name PERMANONE® READY-TO-USE INSECTICIDE
Chemical Name
Common Name
MSDS Number 2044
Chemical Family
Chemical Formulation
EPA Registration No. 432-1277

Bayer Environmental Science
 2 T.W. Alexander Drive
 Research Triangle PK, NC 27709
 USA

For MEDICAL, TRANSPORTATION or Other EMERGENCY call 1-800-334-7577 24 hours/day
 For Product Information call 1-800-331-2867

Product Use Description Insecticide used to control insect pests in residential and recreational areas.

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS No.</u>	<u>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
Permethrin	52645-53-1	3.7800	4.1800
Piperonyl butoxide	51-03-6	8.0600	8.9000
Petroleum distillate	64742-55-8		

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SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

<u>Emergency Overview</u>	Caution! Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling.
Physical State	Liquid
Odor	Slight Aromatic
Appearance	Amber
Routes of Exposure	Skin contact.
Immediate Effects	
Eye	Avoid contact with eyes. Eye irritation is slight or negligible.
Skin	Avoid contact with skin or clothing. A slight irritant on brief contact.
Ingestion	Do not take internally.
Inhalation	Avoid breathing spray mist.

SECTION 4. FIRST AID MEASURES

General	Have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
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	Call a poison control center or doctor for treatment advice. Do not induce vomiting or give anything by mouth to an unconscious person.
Inhalation	Move person to fresh air. Seek medical attention if breathing difficulties occur.
Notes to physician	
Hazards	Contains petroleum distillates. May pose an aspiration pneumonia hazard. This product contains a synthetic pyrethroid.

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SECTION 5. FIRE FIGHTING MEASURES

Flash Point	> 110 °C / > 230 °F
Fire and Explosion Hazards	Combustible. Do not use or store near heat or open flame.
Suitable Extinguishing Media	Foam, Water, Dry chemical, Carbon dioxide (CO ₂)
Fire Fighting Instructions	Keep out of smoke. Cool exposed containers with water spray. Fight fire from upwind position. Wear full protective clothing and self-contained breathing apparatus. Contain runoff to prevent entry into sewers or waterways. Equipment or materials involved in pesticide fires may become contaminated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal	Keep unnecessary people away, isolate hazard area and deny entry. Avoid contact with spilled product or contaminated surfaces.
Land Spill or Leaks	Avoid breathing vapors and skin contact. Wear proper protective equipment. Dike contaminated area with absorbent granules, soil, sand, etc. Large Spill: Material should be recovered. Small spills can be absorbed with absorbent granules, spill control pads, or any absorbent material. Carefully sweep up absorbed spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with soap and water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be removed and disposed. Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

SECTION 7. HANDLING AND STORAGE

Handling Procedures	Do not use near heat or open flame.
Storing Procedures	Store upright at room temperature. Avoid exposure to extreme temperatures. Do not contaminate water, food, or feed by storage or disposal.
Work/Hygienic Procedures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before re-use.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Use only with adequate ventilation. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.
Eye/Face Protection	Safety glasses or Goggles
Hand Protection	Chemical-resistant gloves.
Body Protection	Wear long-sleeved shirt and long pants and shoes plus socks.
Respiratory Protection	When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.
Exposure Limits	

None known.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber
Physical State	Liquid
Odor	Slight Aromatic
Specific Gravity	0.867
Solubility (in water)	Insoluble

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	This material is stable under normal handling and storage conditions described in Section 7.
Conditions to Avoid	Exposure to extreme heat Sources of ignition
Incompatibility	Strong oxidizing agents Strong reducing agents
Hazardous Products of Decomposition	Combustion may produce: Smoke Carbon monoxide

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Aldehydes

Hazardous Polymerization (Conditions to avoid) Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity studies have not been performed on this product as formulated. The acute toxicity data provided is bridged from a similar Permanone Ready-To-Use formulation.

Symptoms observed in studies with laboratory animals exposed at or near the LD50/LC50 included increased urination, decreased activity, nasal discharge, salivation, bulging eyes and erect body hair. Extremely high doses have caused convulsions.

Acute Oral Toxicity LD50: > 5,050 mg/kg

Acute Dermal Toxicity LD50: 2,020 mg/kg
Absorption

Acute Inhalation Toxicity LC50: > 5.22 mg/l 4 h
1-hr exposure (extrapolated from 4-hr LC50): > 20.88 mg/l (for DOT purposes)

Skin Irritation Slightly irritating.

Eye Irritation Minimally irritating.

Sensitization Non-sensitizing

Chronic Toxicity A statistically significant increase in the incidence of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/kg/day of permethrin technical over 85 weeks.

A statistically significant increase in the number of benign liver tumors appeared in mice fed piperonyl butoxide technical at doses which far exceed any anticipated daily human intake. Independent and industry toxicological experts who have reviewed the data agree that the findings of the study do not indicate a health risk to human beings.

Assessment Carcinogenicity

ACGIH

None

NTP

None

IARC

Permethrin 52645-53-1 3

Piperonyl butoxide 51-03-6 3

OSHA

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None

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

This product is highly toxic to fish. Avoid direct application or spray drift to water surfaces. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to fish/aquatic organisms in adjacent sites. Apply this product only as specified on the label. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment washwater.

This product is highly toxic to bees exposed to direct treatment of residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

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

Container Disposal

Metal Containers: Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Plastic Containers: Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

Refillable Container: Replace the dry disconnect cap if applicable, and seal all openings which have been opened during use. Return empty container to a collection site designated by Bayer.

RCRA Classification

Not Regulated under this Statute

SECTION 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated for Domestic Surface Transportation

FREIGHT CLASSIFICATION:

Insecticides or Fungicides, N.O.I., other than poison

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SECTION 15. REGULATORY INFORMATION

EPA Registration No. 432-1277

US Federal Regulations

TSCA list

Piperonyl butoxide 51-03-6
Petroleum distillate 64742-55-8

TSCA 12b export notification

None

SARA Title III - section 302 - notification and information

None

SARA Title III - section 313 - toxic chemical release reporting

Permethrin 52645-53-1 1.0%
Piperonyl butoxide 51-03-6 1.0%

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State right-to-know ingredients

Permethrin	52645-53-1	NJ
Piperonyl butoxide	51-03-6	NJ
Petroleum distillate	64742-55-8	MA

Canadian Regulations

Canadian Domestic Substance List

Piperonyl butoxide 51-03-6
Petroleum distillate 64742-55-8

Environmental

CERCLA

None

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

International Regulations

EU Classification

Petroleum distillate 64742-55-8 Toxic
R Phrases May cause cancer.
S Phrases Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

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European Inventory of Existing Commercial Substances (EINECS)

Permethrin	52645-53-1
Piperonyl butoxide	51-03-6
Petroleum distillate	64742-55-8

SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
NFPA	1	1	0	

MSDS REVISION INDICATOR: Company address change.

Revision Date: 06/07/2006

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