


PYRENONE® 25-5 PUBLIC HEALTH

MSDS Version 1.1

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name PYRENONE® 25-5 PUBLIC HEALTH
Chemical Name
Synonym
MSDS Number 147
Chemical Family Mixture
Chemical Formulation Mixture
EPA Registration No. 432-1050
Canadian Registrat. No.

Bayer Environmental Science
 95 Chestnut Ridge Road
 Montvale, NJ 07645
 USA

For Product Use Information: (800)331-2867 Monday through Friday(CRLF) 8:00AM-4:30PM(CRLF) For Medical Emergency contact DART: (800) 334-7577 24 Hours/Day(CRLF) For Transportation Emergency CHEMTREC: (800) 424-9300 24 Hours/Day

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name</u>	<u>CAS No.</u>	<u>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
Pyrethrin	8003-34-7	5.0000	
Piperonyl butoxide	51-03-6	25.0000	
Isoparaffinic Petroleum Solvent	64742-47-8	20.0000	

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview A medium amber, moderately viscous that is:
 Harmful if swallowed.
 This product is toxic to fish.

Physical State liquid

Odor Very mild

Appearance Clear, medium-amber, moderately viscous liquid

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Routes of Exposure	Inhalation, and ingestion.
Immediate Effects	
Eye	Slightly irritating.
Ingestion	Harmful if swallowed.
Inhalation	May be harmful if inhaled.
Chronic or Delayed Long-Term	See Section 11 for carcinogenic/oncogenic information on piperonyl butoxide.
Medical Conditions Aggravated by Exposure	None known.
Signs and Symptoms	May cause gastrointestinal effects such as nausea, vomiting and diarrhea. Ingestion of large quantities can result in nervous system effects such as dizziness, loss of coordination, tremors and loss of consciousness. Symptoms usually regress with no long lasting effects.

SECTION 4. FIRST AID MEASURES

Eye	Flush eyes with plenty of water.
Skin	Remove contaminated clothing and wash affected areas with soap and water. Contact a physician if irritation persists.
Ingestion	Contact a Physician or Poison Control Center immediately. Do not induce vomiting. This product contains petroleum distillate. Vomiting may cause aspiration pneumonia.
Inhalation	Remove affected person to fresh air. Apply artificial respiration if indicated.
Note to Physician	<p>This product contains a pyrethroid and a petroleum solvent. If ingested and vomiting has not occurred, emesis should be induced with supervision. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered.</p> <p>Do not administer milk, cream or other substances containing vegetable or animal fats. These only enhance absorption of lipophilic substances.</p>

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	> 93 °C / > 199 °F TCC
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Suitable Extinguishing Media Carbon dioxide, dry chemical, foam or water.

Fire Fighting Instructions As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal In case of spill or leak, soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

SECTION 7. HANDLING AND STORAGE

Handling Procedures Do not breathe spray mist.
Remove pets, birds and cover fish aquariums before spraying.
Do not apply as a space spray while food processing is underway.
Except in Federally inspected meat and poultry plants, when applied as a surface spray with care and in accordance with the directions and precautions given on the label, food processing operations may continue.
Food should be removed or covered before treatments.
When using in animal quarters, do not apply directly to food, water or food supplements.

Storing Procedures Store upright at room temperature. Avoid exposure to extreme temperatures.

Work/Hygienic Procedures Wash exposed skin surfaces with soap and water after handling and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Normal mechanical exhaust is recommended.

Eye/Face Protection Safety glasses or goggles.

Body Protection Impervious gloves.

Respiratory Protection Wear a mask or respirator of a type recommended by the US Bureau of Mines to give adequate protection against this material.

Exposure Limits

Pyrethrin	8003-34-7	ACGIH	TWA	5 mg/m3
		NIOSH	REL	5 mg/m3

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Isoparaffinic Petroleum Solvent	64742-47-8	OSHA Z1 OSHA Z1A US CA OEL ACGIH NIC	PEL TWA TWA PEL TWA	5 mg/m3 5 mg/m3 5 mg/m3 200 mg/m3
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, medium-amber, moderately viscous liquid
Physical State	liquid
Odor	Very mild
Specific Gravity	0.884
Density	7.36 lbs/gal
Solubility (in water)	Insoluble insoluble

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Incompatibility	Strong oxidizing agents.
Hazardous Polymerization (Conditions to avoid)	Will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD50 > 5,000 mg/kg
Acute Dermal Toxicity	Absorption: LD50 > 5,000 mg/kg
Acute Inhalation Toxicity	4-Hour LC50 > 4.93 mg/L 1-Hour equivalent LC50 > 19.72 mg/L (for DOT purposes)
Skin Irritation	Slightly irritating
Eye Irritation	Slightly irritating
Sensitization	Sensitizer

No acute toxicity data is available for this formulation. Acute toxicity data listed above is for a similar

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formulation, Turbocide GOLD with Pyrenone, which contains 3.93% Pyrethrins and 32.26% Piperonyl Butoxide.

Chronic Toxicity

In a recent study, marginally higher incidences of benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in lungs of mice following lifetime high doses exposures to pyrethrum.

Marginally higher incidences of benign liver tumors in mice were observed in mice following lifetime high dose exposures to piperonyl butoxide.

The significance of these observations is questionable and under review. The doses at which tumors were observed for both pyrethrum and piperonyl butoxide greatly exceeded potential human exposure from labeled uses.

Assessment Carcinogenicity

NTP: No IARC: No OSHA: No

ACGIH

Pyrethrin

8003-34-7

Group A4

NTP

None

IARC

Piperonyl butoxide

51-03-6

3

OSHA

None

Teratogenicity

There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits for either pyrethrum or piperonyl butoxide. They are not considered to be teratogenic.

Mutagenicity

Pyrethrum was not found to be genotoxic and did not damage DNA in any study conducted (Ames mutagenicity assay, chromosome aberration in Chinese hamster ovaries (CHO) cells, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

PBO was not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

This product is toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below mean high water mark. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes. Shrimp and crab may be killed at application rates recommended on label. Do not apply where these are important resources. Apply this product only as specified on the label.

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SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance Pesticide Disposal: Pesticide, spray mixture or rinsate that cannot be used according to label instructions must be returned to the point of purchase in its original container.

Container Disposal 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.

RCRA Classification

SECTION 14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid, n.o.s. (Pyrethrins)

HAZARD CLASS: 9, PG III

DOT IDENTIFICATION NUMBER: UN3082

DOT SHIPPING LABEL: Class 9

ADDITIONAL SHIPPING PAPER DESCRIPTION
RQ (Pyrethrins)

NOTE: This product is not DOT regulated in quantities of 2 gallons or less.

SECTION 15. REGULATORY INFORMATION

US Federal

EPA Registration No. 432-1050

TSCA list

Piperonyl butoxide 51-03-6

Isoparaffinic Petroleum Solvent 64742-47-8

TSCA 12b export notification

None

SARA Title III - section 302 - notification and information

None

SARA Title III - section 313 - toxic chemical release reporting

Piperonyl butoxide 51-03-6 1.0%

US States Regulatory

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

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Pyrethrin
Piperonyl butoxide

8003-34-7
51-03-6

CA, CT, IL, MN, NJ, PA, RI
NJ

Canadian Regulations

Canadian Registrat. No.

Canadian Domestic Substance List

Pyrethrin	8003-34-7
Piperonyl butoxide	51-03-6
Isoparaffinic Petroleum Solvent	64742-47-8

Environmental

CERCLA

Pyrethrin	8003-34-7
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1 lbs

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

International Regulations

EU Classification

None

European Inventory of Existing Commercial Substances (EINECS)

Pyrethrin	8003-34-7
Piperonyl butoxide	51-03-6
Isoparaffinic Petroleum Solvent	64742-47-8

SECTION 16. OTHER INFORMATION

REVISED SECTIONS:

MSDS REVISION INDICATOR: Company name change.

Print Date: 12/09/2002

Supersedes MSDS, which is older than: 12/09/2002

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