

**TURBOCID GOLD WITH PYRENONE**

MSDS Version 2.1

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name TURBOCID GOLD WITH PYRENONE, Turbocide GOLD with Pyrenone
Chemical Name
Synonym
MSDS Number 381
Chemical Family Mixture
Chemical Formulation Mixture
EPA Registration No. 432-1186
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	4.0300	
Piperonyl butoxide	51-03-6	32.2600	
Isoparaffinic Petroleum Solvent	64742-47-8	>	60.0000

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution. Keep out of the reach of children. Hazard to humans and domestic animals. This product is toxic to fish.

Physical State liquid slightly thin

Odor slightly sweet

Appearance clear, golden-amber

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Routes of Exposure	Inhalation and ingestion. Eye and skin contact.
Immediate Effects	
Eye	Slightly irritating. Avoid contact with eyes.
Skin	Avoid contact with skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.
Ingestion	Harmful if swallowed.
Inhalation	May be harmful if inhaled. Avoid breathing spray mist.
Chronic or Delayed Long-Term	See Section 11 for carcinogenic/oncogenic information on piperonyl butoxide.
Medical Conditions Aggravated by Exposure	None known

SECTION 4. FIRST AID MEASURES

Eye	Flush eyes with plenty of water. Call a physician if irritation persists.
Skin	Wash with plenty of soap and water. If skin irritation persists, call a physician.
Ingestion	Call a physician or Poison Control Center. Do not induce vomiting. This product contains aromatic petroleum solvent. Aspiration may be a hazard. Do not give anything by mouth to an unconscious person. Avoid alcohol.
Inhalation	Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.
Note to Physician	<p>This product contains a synthetic pyrethroid. This product contains 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, which enhance the absorption of lipophilic substances.</p>

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	82 °C / 180 °F Method: Tagliabue Closed Cup
Lower Flammable Limit	1.3 %(V)

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Upper Flammable Limit	8.8 %(V)
Suitable Extinguishing Media	carbon dioxide (CO2), dry chemical, foam, 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	<p>A defective cylinder should not be used. A cylinder that has parts missing, is worn or distorted should be replaced immediately.</p> <p>Soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.</p>
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SECTION 7. HANDLING AND STORAGE

Handling Procedures	<p>Avoid breathing spray mist. Avoid contact with eyes. Avoid contamination of food and foodstuffs, except as directed on the label. Remove pets, birds and cover fish aquaria before spraying.</p> <p>When using this product as a space spray in food processing plants, foods should be removed or covered during treatment. Do not apply as a space spray while food processing is underway. Food processing surfaces and equipment must be covered during treatment or cleaned with a suitable detergent and rinsed with potable water before reuse.</p>
Storing Procedures	Store upright in a cool and dry area.
Work/Hygienic Procedures	<p>Remove contaminated clothing. Wash clothing with detergent and hot water before reusing.</p> <p>Wash thoroughly with soap and water after handling.</p> <p>Vacate premises after treatment and ventilate before reoccupying.</p>

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Normal mechanical exhaust is recommended.
Eye/Face Protection	safety glasses or goggles
Body Protection	impervious gloves
Exposure Limits	

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Pyrethrin	8003-34-7	ACGIH	TWA	5 mg/m3
		NIOSH	REL	5 mg/m3
		OSHA Z1	PEL	5 mg/m3
		OSHA Z1A	TWA	5 mg/m3
		US CA OEL	TWA PEL	5 mg/m3
Isoparaffinic Petroleum Solvent	64742-47-8	ACGIH NIC	TWA	200 mg/m3

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance clear, golden-amber

Physical State liquid slightly thin

Odor slightly sweet

Vapor Pressure 1 mmHg at 100 °F

Specific Gravity 0.864

Density 7.21 lbs/gal

Solubility (in water) insoluble

Other Information PERCENT VOLATILES: 63

NOTE: All physical data given above is for the prefill liquid.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability Stable

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Incompatibility strong oxidizing agents

Hazardous Will not occur

**Polymerization
(Conditions to avoid)**

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity LD50: > 5,000 mg/kg

Acute Dermal Toxicity LD50: > 5,000 mg/kg

Acute Inhalation Toxicity LC50: > 4.93 mg/l 4 h

LC50: > 19.72 mg/l 1 h
for DOT purposes

Skin Irritation Slightly irritating

Eye Irritation Slightly irritating.

Sensitization Sensitizing

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

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 not considered to be teratogenic.

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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. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where these are important resources.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Pesticide that cannot be used according to label instructions must be returned to the point of purchase in its original container.

Container Disposal

This cylinder must not be disposed of in any manner. Cylinders must be returned to point of purchase for credit. All cylinders, valves and caps remain the property of the manufacturer. Federal regulations prohibit the refilling of cylinders without written consent of the manufacturer.

RCRA Classification

Not Regulated under this Statute

SECTION 14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not DOT regulated

SECTION 15. REGULATORY INFORMATION

US Federal

EPA Registration No.	432-1186
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	

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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

Pyrethrin	8003-34-7	CA, CT, IL, MN, NJ, PA, RI
Piperonyl butoxide	51-03-6	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 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)

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SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
HMIS	1	2	0	B
NFPA	1	2	0	

REVISED SECTIONS:

MSDS REVISION INDICATOR: Company name change.

Print Date: 12/10/2002

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

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