
A Company of Hoechst and Shering, Berlin

Synerol[®]
Insecticide

Synerol

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

AgrEvo Environmental Health
95 Chestnut Ridge Road
Montvale, NJ 07645

COMPANY CONTACT: Regulatory Dept.
TELEPHONE NUMBER: (800)438-5837

EMERGENCY TELEPHONE NUMBER
(800)471-0660

PRODUCT NAME: Synerol Insecticide
PRODUCT CODE: E72010KF
CHEMICAL FAMILY: Mixture
CHEMICAL FORMULA: Mixture
EPA REGISTRY NUMBER: 4816-570-432
MSDS IDENTIFICATION CODE/NUMBER: E72010KF

Synerol is a registered trademark of AgrEvo Environmental Health, Inc.

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME:	EXPOSURE LIMITS:	CONCENTRATION PERCENT BY WEIGHT:
Pyrethrins CAS NUMBER: 22781-23-3	None established	2.5
Piperonyl butoxide CAS NUMBER: 51-03-6	None established	12.5
Petroleum distillate CAS NUMBER: 64742-47-8	None established	> 80

INERT INGREDIENTS (24.0%): only the regulated ingredients are listed above.
For additional information, refer to Section 15 (Regulatory Information).

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

**Yellow liquid that is:
Harmful if swallowed.
Toxic to fish.**

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY

Ingestion and inhalation.

EYES

Mildly irritating

SKIN

May cause irritation.

INGESTION

Harmful if swallowed.

CHRONIC (CANCER INFORMATION)

See Section 11 for carcinogenic/oncogenic information on piperonyl butoxide.

SIGNS AND SYMPTOMS

Symptoms reported in cases of accidental ingestion by humans include labored breathing, vomiting and convulsions.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None known.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE

None known.

4. FIRST AID MEASURES

EYES

Flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

SKIN

Remove all contaminated clothing. Wash with plenty of soap and water. Get medical attention if irritation persists.

INGESTION

Call a physician or Poison Control Center. This product contains a petroleum solvent. Aspiration may be a hazard.

INHALATION

Remove to fresh air. If breathing is difficult or if discomfort persists, obtain medical attention.

NOTE TO PHYSICIAN

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.

Do not administer milk, cream or other substances containing vegetable or animal fats. These only enhance absorption of lipophilic substances.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 159 F 71 C TCC

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.

6. ACCIDENTAL RELEASE MEASURES

Soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS

- Do not pour or spill near open flame.
- Remove pets, birds and cover fish aquariums before spraying.
- Do not breath spray mist.
- Do not apply directly to food.
- Do not apply space spray while food processing is underway.
- Except in Federally inspected meat and poultry plants, food processing operations do not have to be stopped while applying a wet spray with care and in accordance with the directions given on the label.
- When using in animal quarters, do not apply directly to food, water or food supplements.

STORAGE PRECAUTIONS

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

WORK/HYGIENIC PRACTICES

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION

Chemical goggles.

SKIN PROTECTION

Impermeable gloves.

RESPIRATORY PROTECTION

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

OTHER/GENERAL PROTECTION

Clean, body covering clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Yellow liquid

ODOR

Very mild solvent odor.

BASIC PHYSICAL PROPERTIES

PHYSICAL STATE: Liquid

SPECIFIC GRAVITY: 0.809 @ 20°C

SOLUBILITY (H₂O): Insoluble

10. STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS

Non-irritating

SKIN EFFECTS

Irritation: Mildly irritating

Absorption: LD₅₀ > 3,000 mg/kg

ACUTE ORAL EFFECTS

LD₅₀ > 3,000 mg/kg

ACUTE INHALATION EFFECTS

4-Hour LC₅₀ > 7.5 mg/L

1-Hour equivalent LC₅₀ > 30 mg/L

CHRONIC (CANCER INFORMATION)

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.

11. TOXICOLOGICAL INFORMATION

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.

CARCINOGENICITY:

NTP: No

IARC: No

OSHA: No

TERATOGENICITY (BIRTH DEFECTS)

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 (GENETIC EFFECTS)

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.

12. ECOLOGICAL INFORMATION

OTHER ENVIRONMENTAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

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. Containers One Gallon and Smaller: Do not reuse container. Wrap in several layers of newspaper and discard in trash.

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 regulated by DOT when shipped in quantities less than 5 gallons.*

15. REGULATORY INFORMATION

SARA TITLE III NOTIFICATIONS AND INFORMATION

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

CAS NUMBER	51-03-6
INGREDIENT NAME	Piperonyl butoxide
PERCENT BY WEIGHT	= 12.5

This information must be included on all MSDSs that are copied and distributed for this material.

15. REGULATORY INFORMATION - Cont.'d

REGULATED INGREDIENTS

INGREDIENT: Pyrethrins
CAS NUMBER: 8003-34-7
PERCENT BY WEIGHT: = 2.5

Regulations:

Illinois Toxic Substance
New Jersey Workplace Hazardous Substance
Pennsylvania Environmental Hazardous Substance
Pennsylvania Workplace Hazardous Substance

INGREDIENT: Piperonyl butoxide
CAS NUMBER: 51-03-6
PERCENT BY WEIGHT: = 12.5

Regulations: SARA Section 313 Toxic Chemical

16. OTHER INFORMATION

HMIS HAZARD RATING

- HEALTH: 1 Slight
- FIRE: 2 Moderate
- REACTIVITY: 0 Negligible
- PROTECTION: G

NFPA HAZARD RATING

- HEALTH: 1 Slight
- FIRE: 2 Moderate
- REACTIVITY: 0 Negligible
- SPECIAL:

MSDS IDENTIFICATION CODE/NUMBER:
E72010KF

PREPARED BY: Regulatory Department
PHONE: (800)438-5837
SUPERCEDES MSDS DATED: 01/13/95

DATE AND TIME OF PRINTING: 04/05/99
10:40:00

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