



Product Name: Scourge[®]Insecticide with SBP-1382[®]/PB 18%+54% MF Forla II
Product Code: 15418
MSDS Number : C2109
Version Date: March 2, 2001

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Material Safety Data Sheet

1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Product Name: Scourge[®]Insecticide with SBP-1382[®]/PB 18%+54% MF
Formula II

Product Code: 15418

MSDS Number : C2109

Chemical Name: Mixture; a.i.'s, resmethrin, piperonyl
butoxide

EPA Registry Number: 432-667

AVENTIS ENVIRONMENTAL SCIENCE USA LP
95 CHESTNUT RIDGE ROAD
MONTVALE, NJ 07645
UNITED STATES

Scourge and SBP-1382 are registered trademarks of Aventis.

PRODUCT USE:

PRODUCT DESCRIPTION: A synthetic pyrethroid for effective adult mosquito, midge and blackfly control. This product has a restricted use classification and can be used only by Certified Applicators or persons under the supervision of such applicators.

2. COMPOSITION / INFORMATION on INGREDIENTS

Component	Cas number	%
Resmethrin	10453-86-8	18%
Piperonyl butoxide	51-03-6	54%
Other ingredients, including:		28%

 For Product Use Information: (800)331-2867 24 Hours/Day
Medic./Trans. Emergency:
(DART) (800)334-7577 24 Hours/Day
(CHEMTREC) (800)424-9300 24 Hours/Day

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----- 3. HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:

An amber liquid with a mild paintlike solvent odor.
■ This pesticide is highly toxic to fish.

POTENTIAL HEALTH EFFECTS

SIGNS AND SYMPTOMS OF EXPOSURE:

Humans might experience transient headache, dizziness, stuffy or runny nose, and scratchy throat.

IMMEDIATE EFFECTS

SKIN:

Harmful if absorbed through skin.

INGESTION:

Harmful if swallowed.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None known.

----- 4. FIRST AID MEASURES -----

After contact with skin:

Wash with soap and plenty of water. Get medical attention.

After contact with eyes:

Flush eyes with plenty of water. Get medical attention if irritation persists.

After inhalation:

Remove individual to fresh air. Get medical attention if breathing difficulty develops.

After ingestion:

Call a doctor or get medical attention. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Avoid alcohol. This product contains aromatic petroleum solvent. Aspiration may be a hazard.

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----- **4. FIRST AID MEASURES (Continued)** -----

Hints for the physician:

This product contains a synthetic pyrethroid and a petroleum solvent. If ingested and vomiting has not occurred, emesis should be induced with supervision. Keep patient's head below hips to prevent aspiration. 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 or instill milk, cream or other substances containing vegetable or animal fats which enhance absorption of lipophilic substances. If localized paresthesia develops, the site should be thoroughly washed with soap and water. Cold cream can be applied to diminish the effect.

----- **5. FIRE FIGHTING MEASURES** -----

FLAMMABLE PROPERTIES

Flash point: 166^oF 74^oC TCC

Advice on protection against fire and explosion:

FIRE FIGHTING INSTRUCTIONS: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Extinguish only if flow can be stopped. Use flooding amounts of water as a fog. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors.

FLAMMABILITY CLASSIFICATION/RATING:

NFPA/OSHA Class: IIIA

NFPA Rating (Fire): 2

Suitable extinguishing media:

Carbon dioxide, dry chemical and foam.

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----- 6. ACCIDENTAL RELEASE MEASURES -----

GENERAL AND DISPOSAL: Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the adverse effect of the spill. Ensure that the disposal is in compliance with all Federal, State/Provincial, and local regulations (see Section 13 for applicable RCRA Number). Refer to Section 15 for applicable Reportable Quantity (RQ) and other regulatory requirements.

LAND SPILL OR LEAK

Small Spills: Absorb with an inert absorbent material such as granular clay, saw dust, or pet litter. Sweep up carefully while avoiding the formation of a dust cloud. Place in an approved chemical waste container for disposal. Rinse spill area with small amount of soapy water. Contain and absorb the rinsate with inert absorbents and place into the same disposal container. Area can be washed with water to remove the last trace residue. Do not allow water to contaminate water supplies or sewers.

Large Spills: Eliminate all ignition sources. Stop leak if you can do so without coming into contact with spilled material. Dike far ahead of liquid spill for later disposal. All equipment used to clean up spill should be grounded. Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs. Contact Aventis for further assistance if necessary.

----- 7. HANDLING and STORAGE -----

Handling:

- Avoid contact with skin, eyes, or clothing.

Storage:

- Do not contaminate water, food or feed by disposal.
- Store product in original container in a locked storage area.

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----- **8. EXPOSURE CONTROLS / PERSONAL PROTECTION** -----

Hygiene measures:

- Wash thoroughly with soap and water after handling.

Personal protective equipment

MANUFACTURING, FORMULATION AND OTHER NON-AGRICULTURAL USES

ENGINEERING CONTROLS

Control airborne concentrations below the appropriate exposure guideline (see below for any applicable OSHA/ACGIH Exposure Limits). Local exhaust ventilation may be necessary.

EYE/FACE PROTECTION

Wear safety glasses, splash goggles or face shield.

SKIN PROTECTION

Wear chemical-resistant gloves (Neoprene, Nitrile, PVC) and other protective clothing to avoid skin contact.

RESPIRATORY PROTECTION

Ensure good ventilation. If not adequate, use a chemical cartridge-type respirator approved by the National Institute of Occupational Health and Safety.

GENERAL PROTECTION

Eye wash facility and safety shower should be available.

EXPOSURE GUIDELINES:

Aromatic petroleum solvent (64742-94-5)
Manufacturer's Recommended Limit: 100 ppm

----- **9. PHYSICAL and CHEMICAL PROPERTIES** -----

APPEARANCE: An amber liquid.

ODOR: Mild paintlike solvent odor.

BASIC PHYSICAL PROPERTIES

PHYSICAL STATE: Liquid

PH: Not applicable

VAPOR PRESSURE: Not available

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----- **9. PHYSICAL and CHEMICAL PROPERTIES (Continued)** -----

VAPOR DENSITY (AIR=1): Not available
EVAPORATION RATE (BUTYL ACETATE = 1): Not available
SPECIFIC GRAVITY OR DENSITY: 1.01 g/cm³ @ 21°C
PACKING (BULK) DENSITY: 8.41 lb/gal @ 21°C
BOILING POINT/RANGE: Not available
MELTING/FREEZING POINT RANGE: Not available
SOLUBILITY (IN WATER): Not available
SOLUBILITY IN SOLVENTS/OIL (SPECIFIED): Not available
DUST EXPLOSION SEVERITY DATA: Not applicable
MINIMUM IGNITION ENERGY (MJ): Not available
MINIMUM EXPLOSION CONCENTRATION (MEC): Not available
LIMITED OXYGEN CONCENTRATION (LOC): Not available
VISCOSITY: 35.6 cp at 21.4°C

----- **10. STABILITY and REACTIVITY** -----

CHEMICAL STABILITY:

Stable

CONDITIONS TO AVOID:

Extreme heat or sources of ignition.

INCOMPATIBILITY:

Strong oxidizing and strong reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition products may include carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION:

Will not occur

----- **11. TOXICOLOGICAL INFORMATION** -----

There are no acute toxicological data available for this formulation.

THE FOLLOWING DATA WERE DEVELOPED WITH: Scourge Insecticide with SBP-1382/Piperonyl Butoxide 18% + 54% MF Formula II (EPA Reg. No. 432-667), which contains 18% Resmethrin and 54% Piperonyl Butoxide.

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----- **11. TOXICOLOGICAL INFORMATION (Continued)** -----

ACUTE TOXICITY

ORAL LD50 (rat): 2,700 mg/kg (slightly toxic)
DERMAL LD50 (rabbit): > 2,000 mg/kg (slightly toxic)
INHALATION LC50 (rat, 4hr): > 2.64 mg/L (practically non-toxic)
EYE IRRITATION (rabbit): non-irritating
SKIN IRRITATION (rabbit): slightly irritating
SKIN SENSITIZATION (guinea pig): non-sensitizing

NOTE: The severity classifications listed above are those of Aventis, and, particularly for eye irritation, may not always coincide with EPA-mandated Precautionary Statements.

THE FOLLOWING DATA WERE DEVELOPED WITH: resmethrin and piperonyl butoxide, the active ingredients

SUBCHRONIC (TARGET ORGAN EFFECTS)

The NOEL established for resmethrin in a 90-day inhalation study with rats was 0.1 g/m³ or 0.1 mg/L. The NOEL for resmethrin was 10 mg/kg/day in the diet when fed to dogs for 180 days. Rats tolerated diets containing 5000 ppm of piperonyl butoxide without adverse effects for 17 weeks.

CHRONIC TOXICITY AND CARCINOGENICITY

Resmethrin was not considered to be oncogenic based on chronic feeding studies conducted in rats and mice.

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.

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY

No effects on reproductive parameters were observed when diets containing up to 500 ppm resmethrin were fed to rats over two successive generations. Resmethrin is not considered to be teratogenic based on studies conducted in rabbits and rats.

Reproductive performance and offspring development in rats were unaffected when piperonyl butoxide was fed at dietary

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----- **11. TOXICOLOGICAL INFORMATION (Continued)** -----

concentrations of up to 1000 ppm over two successive generations. Piperonyl Butoxide was not considered to be fetotoxic or teratogenic based on a study in rabbits.

NEUROTOXICITY

Resmethrin is not considered to be a neurotoxin based on rat feeding studies conducted for up to 32 weeks.

MUTAGENICITY (GENETIC EFFECTS)

Resmethrin is not considered to be mutagenic based on in vitro studies conducted with bacteria and yeast.

----- **12. ECOLOGICAL INFORMATION** -----

ENVIRONMENTAL PRECAUTIONS

This pesticide is highly toxic to fish. For terrestrial uses, 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 sites may be hazardous to fish in adjacent waters. Consult your State's Fish and Wildlife Agency before treating such waters. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

ECOLOGICAL TOXICITY

Aquatic

The 96-hour LC50 values for Scourge in rainbow trout, Bluegill Sunfish, and Sheepshead minnow are: 2.40 ppb, 13.00 ppb, and 8.80 ppb, respectively. The 48-hour LC50 for *Daphnia magna* is 0.10 ppm. For *Penaeus* shrimp and American oyster, the 96-hour LC50 for Scourge is 1.25 ppb and approximately 1.79 ppm, respectively.

Avian

The acute oral LD50 of resmethrin in male California quail was in excess of 2,000 mg/kg. The LC50 of resmethrin fed to Japanese quail in their diet was > 5,000 ppm. The LC50 of resmethrin fed to mallard ducks was also > 5,000 ppm. Dietary administration of resmethrin at 300 ppm for 23 weeks produced no adverse effects on reproduction in Bobwhite

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----- **12. ECOLOGICAL INFORMATION (Continued)** -----

quail and in Mallard duck.

----- **13. DISPOSAL CONSIDERATIONS** -----

Do not contaminate water, food or feed by disposal.

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: 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:

RCRA HAZARDOUS WASTE INGREDIENTS: None

----- **14. TRANSPORT INFORMATION** -----

PROPER SHIPPING NAME: Not DOT Regulated

NOTE: For transport purposes (49 CFR Part 173.132), the calculated 1-Hour LC50 (Rat) is: 10.56 mg/l.

----- **15. REGULATORY INFORMATION** -----

STATE REGULATIONS

CALIFORNIA (Proposition 65): This product contains a chemical (resmethrin) known to the State of California to cause cancer or birth defects or other reproductive harm.

The following chemicals associated with the product are subject to the right-to-know regulations in these states:

Resmethrin (10453-86-8): NJ
Piperonyl butoxide (51-03-6): NJ

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----- **15. REGULATORY INFORMATION (Continued)** -----

U.S. FEDERAL REGULATIONS

EPA Registration Number: 432-667

CARCINOGENICITY: NTP: No IARC: No OSHA: No

SARA TITLE III SECTION 311/312 - HAZARD CLASSES:

Acute Health Hazard - Yes
Chronic Health Hazard - No
Fire Hazard - No
Sudden Release of Pressure Hazard - No
Reactivity Hazard - No

SARA TITLE III - NOTIFICATIONS AND INFORMATION

Section 302 (EHS) ingredients: None
Section 304 (CERCLA & EHS) ingredients (RQ): None

TSCA inventory status

These components are not listed:

Resmethrin 18% (10453-86-8)
Other ingredients, including: 28%

SARA 313 :

Resmethrin 18% (10453-86-8)
Piperonyl butoxide 54% (51-03-6)

INTERNATIONAL REGULATIONS

The following chemical(s) associated with the product have also been listed on the following International inventories:

Resmethrin (10453-86-8): CANADIAN DSL, EINECS
Piperonyl butoxide (51-03-6): CANADIAN DSL, EINECS
Aromatic petroleum solvent (64742-94-5): CANADIAN DSL,
EINECS

WHMIS INGREDIENT DISCLOSURE LISTED COMPONENTS:

CPC NUMBER: None

WHMIS Classification for Control Product Regulations (CPR):
Registered pesticide under US FIFRA regulations; exempt from
CPR classification.

The MSDS contains all CPR required hazard-related
information.

WHMIS HAZARD RATING: See HMIS rating (Section 16)

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----- **16. OTHER INFORMATION** -----

HAZARD RATINGS

	HEALTH	FLAMM	REACT	OTHER
NFPA	1	2	1	
HMIS	1	2	1	G

REVISED SECTIONS:

MSDS REVISION INDICATOR: Changes made to Section 2.

PREPARED BY: Regulatory Department
PHONE: 800-438-5837
SUPERCEDES MSDS DATED: 11/22/2000

DISCLAIMER:

This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.

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