



# MATERIAL SAFETY DATA SHEET

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N° AGR 2287

## 1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND THE COMPANY

**Trade name** : RESIGEN 50 E  
**Product code** : AEF03263904EC36A1  
**Supplier** : BAYER Environmental Science SA  
55,avenue René Cassin - - - 69009 LYON - FRANCE  
Phone number : 04.72.85.25.25  
**Emergency numbers 24H/24H**                      **Tel:** 04.72.85.25.25                      **Fax:** 04.72.85.27.99

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

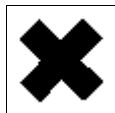
**Composition/Information on ingredients**  
**Chemical family** : Pyrethroids.  
**Kind of use** : Insecticide, emulsifiable concentrate.

### Hazardous constituents

CAS	EINECS	Wording	Concentration	Symbol	Risks Phrases
028434-00-6	249-013-5	S-Bioallethrin	0.78%	Xn, N	20/22-50/53
052645-53-1	258-067-9	Permethrin 25/75	18.69%	Xn, N	22-50/53
000051-03-6	200-076-7	Piperonyl butoxide	16.83%	N	51/53
64742-47-8	265-149-8	Odorless kerosene	> 40%	Xn	65

## 3. HAZARDS IDENTIFICATION

### Symbols and labelling



**Xi: Irritant**

**Main hazards** : Flammable.  
Irritating to eyes.

**Specifics risks** : Dangerous to aquatic organisms.



**Main acute symptoms** : The following symptoms may occur :

- \*Local : skin and eyes paraesthesiae which may be severe. Usually transient with resolution within 24 hours.
- \*Systemic : dizziness, headache, nausea, anorexia, fatigue, listlessness, vomiting, epigastric pain, muscular fasciculation and convulsions (in extreme circumstances).

#### **4. FIRST-AID MEASURES IN CASE OF EXPOSURE**

**Instructions for physician** :

- \*Symptomatic treatment after decontamination.
- \*Local contamination :
  - \*Skin : apply vitamin E cream or simple toilet milks.
  - \*Eye : instillation of local anaesthetic drops e.g. 1% amethocaine hydrochloride eye drops.
- \*Give analgesics as necessary.
- \*Can cause severe pain.
- \*Systemic poisoning :
  - \*Following ingestion of very large amounts or exposure to very high concentrations, the following measures should be considered :
    - \*Monitor function : respiratory, cardiac.
    - \*Observe specific parameters : electrocardiograph, check for pulmonary oedema in event inhalation.
    - \*Gastric lavage. Charcoal administration.
    - \*Endotracheal intubation. Artificial respiration as necessary.
    - \*Elimination by : dialysis, haemo-perfusion.
    - \*Anticonvulsions therapy : diazepam I.V.
  - \*Contraindications : 1. Adrenergic compounds. 2. Atropine.
  - \*Recovery : spontaneous.
  - \*Must not be confused with organophosphorus compounds.

**Inhalation** :

- Remove to fresh air.
- \*Keep patient at rest.
- \*Obtain medical advice immediately.

**Skin contact** :

- \*Carefully remove contaminated clothing.
- Wash affected area with soap and water.
- Seek medical advice immediately.

**Eyes Contact** :

- Rinse immediately with clean water for at least 15 minutes and obtain medical aid.

**Ingestion** :

- Wash out mouth with water.
- Do not induce vomiting.
- \*Give water to drink.
- \*Keep patient at rest.
- Seek medical advice immediately.



## 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media** : Water spray, CO<sub>2</sub>, foam, dry chemical.
- Unsuitable extinguishing media** : Water jet from a fire hose.
- Fire and explosion hazards** : Flammable  
In case of fire, the product emits toxic and irritating fumes.
- Special protective equipment** : \*Before intervention, wear protective clothing.  
Wear a self-contained breathing apparatus.
- Other recommendations** : \*Keep away from heat and flame if possible.  
Cool with water the containers against excessive heat.  
Avoid rejection of extinguishing water in the environment.  
Do not breathe fumes.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal protection** : Before intervention wear protective equipment (cf § 8-2).  
Avoid contact with chemical or contaminated surfaces.
- Environment precautions** : Prevent entry into drains, sewers and watercourses.  
Absorb with liquid binding material sand, cement, lime.  
Sweep into a suitable container and store the material collected.  
\*Keep safe for disposal according to regulations.
- Clean-up procedures** : Rinse the polluted area with a large quantity of water and cleaning agent.  
\*Store the washing waters into a suitable container.

## 7. HANDLING AND STORAGE

### HANDLING

- Technical measures** : Use local exhaust ventilation at the source of formation of vapour.  
Provide an ocular shower and sanitary installations near the working place.
- Special protection measures** : \*Do not spray facing the wind.
- Specifics precautions** : Wash hands and exposed part of the body with soap after work.

### STORAGE

- Sensitivity to damp** : \*Keep protected from moisture.
- Sensitivity to light** : Keep protected from direct sunlight.
- Storage temperature** : Keep at ambient temperature.
- Low temperature to be avoided** : Protect from frost.
- Special storage requirement** : Keep away from food, drink and animal feedingstuffs.
- Storage facilities** : Keep container tightly closed in cool and well-ventilated place.
- Recommended packaging material** : Aluminium, PET.



**Other recommendations** : Keep only in the original container.  
Do not re-use empty containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### CONTROL OF EXPOSURE

**TWA** : 200 ppm (solvent).

### PERSONAL PROTECTION

**Respiratory protection** : Wear mask with organic vapour cartridge (A type).

**Hands protection** : Wear suitable gloves.

**Eyes protection** : \*Wear chemical goggles.

**Skin and body protection** : Wear suitable protective clothing.

**Specific hygiene measures** : Use only in well-ventilated area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : Clear amber liquid, mild odour.

**Flash point** : 48°C.

**Inflammability limits** : Lower : 0.6 % v/v.  
Upper : 7 % v/v.

**Density** : 0.92 to 0.94

**Solubility** : Soluble in organic solvents.  
Emulsifiable in water.

**Partition coefficient  
Octanol/Water** : S-Bioallethrin : Log Pow = 4.70  
Permethrin 25/75 : Log Pow = 6.1  
\*Piperonyl butoxide : Log Pow = 4.75.

## 10. STABILITY AND REACTIVITY

**Products of decomposition** : No decomposition under normal conditions.

**Avoided conditions** : \*Keep away from heat and source of ignition.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** : LD 50 oral route/rat : > 2000 mg/kg.  
LD 50 cutaneous route/rabbit : > 9260 mg/kg.

**Irritant potential** : Ocular irritation (rabbit) : irritating.  
Cutaneous irritation (rabbit) : slightly irritating.

**Sensitization** : No known reports of skin sensitisation.  
Due to the presence of solvents in the preparation dermatosis may occur by repeated and prolonged contact with skin.



<b>Chronic toxicity</b>	: *S-Bioallethrin : no data knows. *Permethrin : Not mutagenic Not teratogenic Not carcinogenic.
<b>Comments/symptoms</b>	: Some cutaneous sensations may occur, such as burning, stinging sensations on the face and mucosa, without lesions and transient some hours, maximum 24 h. *Due to the presence of solvents in the preparation, may cause lung damage if swallowed.

## 12. ECOLOGICAL INFORMATION

<b>Environment protection</b>	: Do not throw out into drains, sewers, watercourses or environment.
<b>Persistence and degradability</b>	: The product is expected to be readily biodegradable.
<b>Ecotoxicity</b>	: Ecotoxicological assessment available for the active ingredient. Permethrin 25/75 : LC 50 fish (96h) : 0.019 mg/l. *EC 50 daphnia (48h) : 0.002 mg/l. S-Bioallethrin : LC 50 fish (96h) : 0.01 mg/l.
<b>Bioaccumulation</b>	: The product is not expected to bioaccumulate.

## 13. DISPOSAL CONSIDERATIONS

<b>Waste and residue</b>	: Incineration in accordance with the local waste regulation authority. *Do not discharge washing waters in public sewers and water sources (ponds, streams...)
<b>Destruction soiled packaging</b>	: Empty and triple rinse. Make the container unusable. Disposal must be treated according to official local regulation.

## 14. TRANSPORT INFORMATION

<b>N° UN</b>	: 1993
<b>BY ROAD</b>	
<b>Transport assimilation</b>	: Flammable liquid, n.o.s. (Odorless kerosene)
<b>Class</b>	: 3
<b>Item number</b>	: 31°C)
<b>Label</b>	: 3
<b>Hazard Code</b>	: 30
<b>O.A.C.I. (By Air)</b>	
<b>Transport assimilation</b>	: Flammable liquid, n.o.s. (Odorless kerosene)
<b>Class</b>	: 3
<b>Group</b>	: III
<b>Label</b>	: 3



<b>Passengers</b>	: 309 (60 L)
<b>Cargo</b>	: 310 (220 L)
<b>I.M.D.G. (By Sea)</b>	
<b>Transport assimilation</b>	: Flammable liquid, n.o.s. (Odorless kerosene)
<b>Class</b>	: 3.3
<b>Group</b>	: III, page 3345
<b>Label</b>	: 3
<b>Mark</b>	: Marine pollutant (S-Bioallethrin - Permethrin)

## 15. REGULATORY INFORMATION

### COMMUNITY REGULATIONS

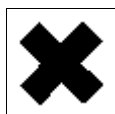
**Labelling EC** : Labelling according to EC regulations.

### LOCAL REGULATIONS OF COUNTRY

**Listed facilities** : 1155 (France).

**Professional diseases** : Concerned : table 84 (France).

### Symbols and labelling



**Xi: Irritant**

### SPECIAL RISKS (R)

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10 : Flammable.  
36 : Irritating to eyes.

### SAFETY ADVICE (S)

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13 : Keep away from food, drink and animal feedingstuffs.  
2 : Keep out of the reach of children.  
20/21 : When using do not eat, drink or smoke.  
26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## 16. OTHER INFORMATION

**Further indications** : Refer also to technical instructions for use.

**Document on reference** : In-house data. SDS SIS/RES/996.

NOTA: (\*) up-dated data.



The information given in this data sheet has been introduced in accordance with the guidelines established by article 10 of EEC directive, dated March 5, 1991. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to apply any additional national requirements.