

MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION	EFFECTOR
Date of Preparation	15/05/2013
Date of Issue	15/05/2013
MSDS No	FORM_MSDS_R&D_099_00
Renewal Date/No	

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PREPARED BASED ON REGULATION ON PREPARATION AND DISTRIBUTION OF SAFETY DATA SHEETS ABOUT HAZARDOUS MATERIALS AND PREPARATIONS (O.G. issue no 27092 dated 26/12/2008).

1. MATERIAL/PREPARATION AND COMPANY/OWNER IDENTIFICATION:

1.1 Material/Preparation Identification:

Product Name : **EFFECTOR**
Product Content : Alpha-Cypermethrin 100 g/L
Formulation Form : EC (Emulsion Concentrate)

Alpha-Cypermethrin

Cas No: 67375-30-8

IRAC: 3A pyrethroid

1.2 Usage of the Material/Preparation:

Insecticide

1.3 Company Identification:

Manufacturing and License Holding Company:

Company Name : AGRI SCIENCES TARIM VE ILAC UR. SAN. TIC. LTD. STI.
Address : Bekir Saydam Caddesi Pancar No: 31 Torbali / IZMIR
Telephone : +90 0232 864 13 33
Fax : +90 0232 864 16 79

1.4 Emergency Contact Telephone:

In case of an emergency please call +90 0232 864 13 33.

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2. COMPOSITION AND INFORMATION ON INGREDIENTS:

Material	g/Kg	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Alpha-Cypermethrin	100	67375-30-8	257-842-9	T; Xn; Xi; N	R25, R48/22, R37, R50/53	Xn; R25, R48/22, R37, N; R50/53
Solvesso 100	700-800	918-668-5	-	Xn; Xi	R10, R20/21, R38	R10, Xn; R20/21, R38
Others*	Outside classification due to absence of hazardous material.					

- ¹ R explanations are under section 16.

3. HAZARD IDENTIFICATION:



Xn: Harmful



N: DANGEROUS FOR THE ENVIRONMENT

R10: Flammable.

R20/21: Harmful to health if inhaled and contact with skin.

R25: Toxic if swallowed.

R37: It irritates respiratory system.

R38: Irritant to skin.

R48/22: Harmful: Serious harm danger to health if swallowed for long time.

R50/53: Too toxic for aquatic organisms and may cause long-term adverse effects in the aquatic environment.

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4. FIRST AID MEASURES:

Poisoning indicators: If swallowed, there are symptoms such as unbalance and convulsion in body movements. If contaminated skin in a great amount during transportation and application, there may be temporary symptoms such as numbness, fire and emotionlessness.

First Aid Measures: Call a doctor. Take the pesticide label and package with you. Take the patient away from the contaminated place. Give life kiss. Take off contaminated clothes and if contaminated the skin and eyes, wash with plenty of water and soap. Keep the patient in a calm place.

Antidote and Necessary Information: There is no specific antidote. The treatment is applied according to the symptoms

5. FIRE FIGHTING MEASURES

Extinguisher: Pressed water, CO₂, extinguisher powder, foam, sand. Get intervene to extinguish the fire until a serious danger occurs. Wear a protective mask.

In well-ventilated areas: Face mask with combined filter (It does not protect from carbon mono oxide.)

In closed areas: Isolation device (inhalation via independent air source). Prevent extinguisher water to spread to environment.

During the fire, take the hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxide gases into account

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6. ACCIDENTAL RELEASE MEASURES:

General Information: Please use the personal protection equipment defined under Section 8.

Personal Precautions: Do not touch spilled product or contaminated surfaces. Do not eat, drink or smoke while handling spilled product.

Clean-up Methods: The poured material is collected with a dust holder device or vacuum cleaner. Place the product into tight plastic containers and keep safely until it is disposed. Contaminated materials and surfaces should be cleaned in compliance with environmental regulations

Additional Precautions: Refer to Section 7 for safe handling instructions. Refer to Section 8 for personal protections equipment. Refer to Section 13 for disposal.

7. HANDLING AND STORAGE

Handling : Keep away from acids. Please use the personal protection equipment specified under Section 8. Do not eat or drink while using. Prevent the contact with mouth, skin and eyes. Do not inhale. Wash your hands after using. Other security precautions are not required except of stated warnings during using the closed package. Use only in rooms, in which there is a local sucking device.

Storage : Keep in original package in cool, dry and well ventilated places. Keep away from food, drink and animal feed items. Keep away from direct sunlight. Keep it in places that children cannot reach. Storage temperature 0-40° C

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Precautions: Ensure appropriate general or local ventilation to keep the product concentration under allowed limits.

Personal Protection Equipment:

Eye : Use eye protection equipment compliant with EN 166.

Skin : Use protective clothing and appropriate gloves. Use 2 layers of clothing, if possible. Use CE marked Nitrile Rubber (min. 0.40 mm thick). Contaminated gloves should be washed. Any gloves that cannot be cleaned inside and outside should be disposed.

Respiratory : Use respiratory apparatuses compliant with EN 149:2001. Any respiratory protection apparatus should only be used for short term operations, as a part of risk minimization measures, e.g. in case of local ventilation. Comply with operation instructions and warnings of the manufacturer during use of respiratory protection apparatuses.

Hygiene Measures: Do not eat, drink or smoke while handling the product. Wash your hands each time before eating, drinking, smoking or going to the toilet

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Clear liquid
Color : yellow, orange
Odor : Weak
Density : $0,92 \pm 0,05 \text{ g/cm}^3$ (20⁰C)
Flashing Point : 43 C
pH : 3-7 10% (20⁰C)

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10. STABILITY AND REACTIVITY

- Conditions to be avoided** : Extreme degrees and direct sun light
Materials to be avoided : None
Dangerous reaction : No reaction in appropriate storage and usage. It is resistant in mentioned storage conditions.

11. TOXICOLOGICAL INFORMATION

Alpha-Cypermethrin Technical Material:

Acute Oral LD₅₀ rat 57 mg/kg (within corn oil).
Eye and skin Acute percutaneous LD₅₀ rat and rabbit >2000 mg technical/kg.
Inhalation LC₅₀ (4 hour, only with smelling) rat >0.593 mg/l
NOEL (1 year) dog >60 mg/kg diet (1.5 mg/kg b.w. daily).
ADI/RfD (JMPR) 0.02 mg/kg b.w. (group ADI cypermethrin, alpha-cypermethrin and zeta-cypermethrin) [2006]; (JECFA evaluation) 0.02 mg/kg b.w. [1996]; (EC) 0.015 mg/kg b.w. [2004].

12. ECOLOGICAL INFORMATION

Alpha-Cypermethrin Technical Material:

Birds LD₅₀ northern bobwhite quail >2025 mg/kg.
LC₅₀ northern bobwhite quail >5000 mg/kg nutrition.
Fish LC₅₀ (96 hours) rainbow trout 2.8 µg/l;
Algae EC₅₀ (96 hours) *seudokirchneriella subcapitata* >100 µg/l.
Bee Toxic for bees. LD₅₀ (24 hours) 0.059 µg/bee; LC₅₀ (24 hours) 0.033 µg/hours.

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13. DISPOSAL INFORMATION

Product : Do not dispose it together with household wastes. Waste residue should not be spilled into wastewater canals. Any product wastes should be disposed of in compliance with Hazardous Wastes Control Regulations

Contaminated Materials : Empty containers should not be used for other products. Completely emptied and rinsed containers should be disposed in compliance with regulations. Non-clearable containers should be disposed of as hazardous materials.

14. TRANSPORTATION INFORMATION

ADR/RID/ADNR

UN-No. : 3082

Hazard Mark : 9

Packing Group : III

Product type : UN 3082 MATERIAL HARMFUL FOR ENVIRONMENT, LIQUID N.O.S (INCLUDE ALPHA-CYPERMETHRIN AND SOLVESSO 100.)

IMDG

UN-No. : 3082

Class : 9

Packing Group : III

EMS :

Marine Pollutant : Yes

Product type : UN 3082 MATERIAL HARMFUL FOR ENVIRONMENT, LIQUID N.O.S (INCLUDE ALPHA-CYPERMETHRIN AND SOLVESSO 100.)

IATA

UN-No. : 3082

Class : 9

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15. REGULATORY INFORMATION

This data sheet is prepared based on regulation on preparation and distribution of safety data sheets about hazardous materials and preparations (O.G. issue no 27092 dated 26/12/2008).

Hazard Marks and Symbols:



Xn: Harmful



N: Harmful for Environment

Hazardous Materials Listed on the Label

Includes Alpha-Cypermethrin and Solvesso 100.

Risk Phrases:

Physicochemical:

R10: Flammable.

Health:

R20/21: Harmful to health if inhaled and contact with skin.

R25: Toxic if swallowed.

R37: It irritates respiratory system.

R38: Irritant to skin.

R48/22: Harmful: Serious harm danger to health if swallowed for long time.

Environment:

R50/53: Too toxic for aquatic organisms and may cause long-term adverse effects in the aquatic environment

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Safety Phrases:

- S1/2: Lock it up and keep out of the reach of children
- S13: Keep away food, drink and feedstuff.
- S20: Do not eat or drink while using.
- S28: Wash with plenty of water in case of contact with skin.
- S29: Do not pour to sewage system. Dispose this material and its container in dangerous and special waste collecting places.
- S35: Dispose safely of this material and container.
- S36/37/39: Use appropriate protective clothes, gloves and glass/mask.
- S43: If fired, use pressured water, CO₂, fire extinguisher powder, foam, sand.
- S45: If you feel bad or in case of accident, call a doctor (if possible, show the label)
- S46: Contact a doctor if swallowed, show the container or label
- S56: Dispose this material and the container in dangerous and special waste collecting places.
- S64: In case of swallow, wash the mouth with water (If the patient is conscious)

Important Labeling:

Follow instructions to avoid personal and environmental risks

16. OTHER INFORMATION

All Danger Signs and Explanations under Section 2

- T: Toxic
- Xn: Harmful
- Xi: Irritant
- N: Dangerous for the environment

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All Risk Phrases under Section 2:

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Prepared By : Secil CANAYAKIN

This material safety data sheet is provided as a supplement to instructions of manufacturer; however it does not replace instructions of manufacturer. The information provided in this sheet only conforms to the regulatory criteria known at the time of the preparation of Safety Data Sheet. Required data are gathered in accord with "Regulation on Preparation and Distribution of Safety Data Sheets about Hazardous Materials and preparations (O.G. issue no 27092 dated 26/12/2008)". Concerned organizations and persons are invited to comply with the abovementioned regulation.