

PRODUCT SAFETY DATA SHEET

SUBSTANCE / PREPARATION NAME

EXCALANCE

Date of preparation	27/07/2015
Release Date	27/07/2015
MSDS No	FORM_MSDS_R&D_212_00
Renewal Date/No	

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TE This form is based on SAFETY DATA FORMS AND REGULATION ABOUT THE PREPARATION AND DISTRIBUTION OF HAZARDOUS SUBSTANCES (dated 26/12/2008 and 27092 numbered).

1. SUBSTANCE/PREPARATION AND COMPANY/ DEFINITION OF BUSINESS OWNER:

1.1 Substance/ Presentation Of The Preparation:

Product Name : EXCALANCE
Product Description : Esfenvalerate 200g/L
Formulation Type : EC (Concentrated Emulsion)

Esfenvalerate

Cas No: 66230-04-4

EC No:-

IRAC: 3A pyrethroid

1.2 Usage of Substance/Preparation:

Insecticide

1.3 Presentation of the Company:

Manufacturer and Licensee Company:

Company Name : AGRİ SCIENCES TARIM VE İLAÇ ÜR. SAN. TİC. LTD. ŞTİ.
Adress : Bekir Saydam Caddesi Pancar No: 31 Torbalı / İZMİR
Telephone : +90 0232 864 13 33
Fax : +90 0232 864 16 79

1.4 Emergency Telephone:

Please call +90 0232 864 13 33 in an emergency.

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2. INFORMATION ABOUT THE CENTENT / COMPOSITION:

Substance	g/L	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Esfenvalerate	200	66230-04-4	-	T,Xi,N	R23/25,R43, R50/53	Xn,N; R20,R22,R43,R50/53
Acetophenone	100	98-86-2	202-708-7	Xn,Xi	R22, R36	Xn; R22
Ksilen	>500	1330-20-7	125-535-7	Xn,Xi	R10, R20/21, R38	Xn;R10 R20/21, R38
Others	These are excluded because of not containing hazardous substance.					

- Descriptions about ¹R are given in chapter 16.

3. IDENTIFICATION OF HAZARDS:



Xn: Harmful



N: Dangerous for the enviroment

R10: Flammable.

R20: Harmful by inhalation

R21: Harmful in contact with skin

R22: Harmful if swallowed.

R38: Irritating to skin

R43: May cause sensitisation by skin contact.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R65: Harmful: may cause lung damage if swallowed

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4. FIRST AID PRECAUTIONS:

Symptoms of Poisoning: There are not any specific symptom. General symptoms are; initially nausea, vomiting, stomachache and diarrhea. It can cause to skin and eye irritation when contacted with drug.

First Aid Measures: If it is contacted with eye, flush eyelids slowly for 10 - 15 minutes. If necessary, consult to a doctor with medication. If the patient swallowed, vomiting the patient. Stomach should be washed, by paying attention to not to escape the stomach contents into the respiratory tract.

Antidote and Required Information: There is no a special antidote. Supportive treatment according to symptoms.

5. FIRE CONFLICT PRECAUTIONS

Required Personal Protective Equipment in Aid: Do not breathe fumes of explosion and fire. If possible, use self contained breathing apparatus during fire.

Hazards: Formation of dangerous gases is taken into account in case of fire.

Fire Extinguishers: Foam, carbon dioxide, extinguishing powder.

Other Informations: Remove the product from fire areas, cool containers with water. If possible, use sand or earth after fire fighting water.

6. ACCIDENTAL RELEASE PRECAUTIONS:

General Information: Use personal protection devices, specified in section 8.

Personal Alerts: Avoid contact with spilled product or contaminated areas. Do not eat, drink or smoke when dealing with spilled product.

The Cleaning Process: The product is collected with liquid retaining material (such as peat, sawdust, chemical binder. Substance collected into hard plastic containers and stored in a secure way until to destroy. Contaminated substances, cleaned according to environment and ground instructions. The product flowing to drains or sewers is blocked. If waste is mixed with water, it is reported to the authorities.

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Additional Precautions: Look at section 7 for safe use. Look at section 8 for personal protective equipment. Look at section 13 for disposal.

7. HANDLING AND STORAGE

Handling : Use personal protective equipments specified in section 8. Do not eat or drink anything during the usage. Avoid contact with skin and eyes. Do not breathe it. Wash your hands after usage. It does not need any other security precautions other than instructions on it. Use only the rooms with appropriate exhaust ventilation.

Storage : Store in original container in a cool, dry and well-ventilated place. Keep away from foods, drinks and animal feedstuffs. Protect from direct sunlight. Protect against freezing, do not put to reach area of children.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Precautions: Keep the substance concentration below the allowable limits by providing the appropriate general or regional ventilation.

Personal Protective Equipment:

Eye : Use safety glasses according to EN 166.

Skin : Use protective clothing and suitable gloves. If possible, use 2 layers of clothing. Use CE marked Nitrile rubber gloves (min 0,40 mm thick). Wash contaminated gloves. Dispose of the not cleanable gloves.

Respiration: Use breathing apparatus according to EN 149:2001. Breathing apparatus only used in short-term works to reduce the risk, for example, in local ventilations. Warning instructions prepared by manufacturers about respiratory protection apparatus must be followed.

Hygiene Precautions: Do not eat, drink or smoke during usage. Wash your hands every time before going to the toilet, eating, drinking and smoking.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid, clear
Color	: Yellowish
Odour	: Aromatic
Density	: $0,90 \pm 0,05 \text{ g/cm}^3$ (20 ⁰ C)
pH	: 5-8 1% (20 ⁰ C)
Flash Point	: 25±5 ⁰ C.

10. STABILITY AND REACTION

Conditions to avoid : Extreme temperatures and direct sunlight.

Substances to avoid : Avoid from strong acids and bases.

Hazardous reactions : There is not hazardous reactions when stored and handled suitable. Resistant to storage conditions. Hazardous polymerization products does not occur.

11. TOXICOLOGICAL INFORMATION

Esfenvalerate Technical Substance:

Oral Acute oral LD₅₀ for rats 75–88 mg/kg. **Skin and eye** Acute percutaneous LD₅₀ for rats >5000, rabbits >2000 mg/kg. Slight skin irritant; mild eye irritant. Not a skin sensitiser. **NOEL** for rats 2 mg/kg b.w. **ADI/RfD** (JMPR) 0.02 mg/kg b.w. [2002]; (EC) 0.02 mg/kg b.w. [2000]; (EPA) 0.02 mg/kg b.w. [1996]. **Other** Acute LD₅₀ values vary with the vehicle, concentration, route and species, etc.; values reported sometimes differ markedly. No carcinogenic, developmental or reproductive toxicity in animal tests.

Toxicity Class WHO (a.i.) II; EPA (formulation) II **EC classification** T; R23/25| R43| N; R50, R53| concn. dep.

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12. ECOLOGICAL INFORMATION

Esfenvalerate Technical Substance:

Birds Acute oral LD₅₀ for bobwhite quail 381 mg/kg. LC₅₀ (8 d) for bobwhite quail >5620, mallard ducks 5247 ppm. **Fish** Extremely toxic to aquatic animals. LC₅₀ (96 h) for fathead minnows 0.690, bluegill sunfish 0.26, rainbow trout 0.26 µg/l. **Daphnia** LC₅₀ (48 h) 0.24 µg/l. **Bees** LD₅₀ (contact) 0.017 µg/bee.

13. DISPOSAL INFORMATION

Product : Wastes should be disposed of with household waste. The remaining amount of waste must not be poured into a sewage canal. Hazardous waste should be disposed of according to control regulations.

Contaminated Packaging : Empty containers should be used for other products. Completely emptied and shaken containers must be properly disposed. Uncontaminated packaging should be disposed of as hazardous waste.

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN-No. : 3082

Hazard Signal : 9

Packaging Group : III

Description of the goods : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (containing esfenvalerate, xylene and acetophenone)

UN-No. : 3082

Class : 9

Packaging Group : III

EMS :

Marine Pollutant : Yes

Description of the goods : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (containing esfenvalerate, xylene and acetophenone)

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IATA

UN-No. : 3082

Class : 9

Packaging Group : III

EMS :

Marine Pollutant : Yes

Description of the goods : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (containing esfenvalerate, xylene and acetophenone)

15. REGULATORY INFORMATION

This form is based on SAFETY DATA FORMS AND REGULATION ABOUT THE PREPARATION AND DISTRIBUTION OF HAZARDOUS SUBSTANCES (dated 26/12/2008 and 27092 numbered).

Hazard Signal and Symbol:



Xn: Harmful



N: Dangerous for the environment

Hazardous Substances Found On The Label

Containing Xylene and Acetophenone and Esfenvalerate.

Risk Phrases

Physicochemical:

R10 : Flammable.

Health:

R20: Harmful by inhalation

R21: Harmful in contact with skin

R22: Harmful if swallowed.

R38: Irritating to skin

R43: May cause sensitisation by skin contact.

R65: Harmful: may cause lung damage if swallowed

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Environment:

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety Phrases:

- S1/2 : Keep away from children and store under lock.
- S3 : Keep in a cool place
- S13 : Keep away from foods, drinks and animal feedstuffs
- S24 : Avoid contact with skin
- S29 : Do not empty into drains
- S36/37 : Wear suitable protective clothing and gloves
- S:46 :If swallowed, seek medical advice immediately, show the container or label.
- S56 : Dispose of this material and its container at hazardous or special waste collection point
- S64 : If swallow, rinse mouth with water (Only if the person is conscious).

Important Labeling :

To avoid from risks to man and environment, comply with the instruction of use.

16. OTHER INFORMATIONS

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

Risk phrases mentioned in Section 2:

- R10 : Flammable.
- R20/21 : Harmful, if inhaled and contact with skin.
- R22 : Harmful if swallowed
- R23/25 : Toxic by inhalation and if swallowed
- R36 : Irritating to eyes

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R38 : Irritating the skin.

R43: May cause sensitisation by skin contact.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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Prepared By : Remzi Can KARAN

This security information form is additional to manufacturer firm's instructions, however does not replace with instructions. This form contains regulation criterias for preparation of security form preparation. This form is based on safety data forms and regulation about the preparation and distribution of hazardous substances (dated 26/12/2008 and 27092 numbered). Please, the relevant institutions and individuals act according to this regulation.