

MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION

SAFEZONE

Date of Preparation	27/07/2015
Date of Issue	27/07/2015
MSDS No	FORM_MSDS_R&D_224_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 : SAFEZONE
Product Content : S-metolachlor 915 g/L + Benoxacor 45 g/L
Formulation Type : EC (Emulsion Concentrate)

S-metolachlor

CAS No : 87392-12-9 (S- isomer), 178961-20-1 (R- isomer)
EC No : 203-625-9
HRAC : Chloroacetamide

Benoxacor

CAS No : 98730-04-2
EC No: : -

1.2 Usage of the Material/Preparation:

Herbicide

1.3 Company Identification:

Manufacturing and License Holding Company:

Company Name: AGRİ SCIENCES TARIM VE İLAÇÜR. SAN. TİC. LTD. ŞTİ.

Address : Bekir Saydam Caddesi Pancar No: 31 Torbalı / İZMİR

Telephone : +90 0232 864 13 33

Fax : +900232 864 16 79

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1.4 Emergency Contact Telephone:

Please call +90 0232 864 13 33 and Emergency and/or National Poison Information Center 114 in case of emergency.

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Substance	g/L	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
S-metolachlor	915	87392-12-9 (S- isomer), 178961-20-1 (R- isomer)	203-625-9	Xi, N	R43, R50/53	Xi;R43 N;R50/53
Benoxacor	45	98730-04-2	-	Xi, N	R43, R50	Xi; R43 N; R50
Xylene	59.24	1330-20-7	215-535-7	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



Xi: Irritant



N: DANGEROUS FOR THE ENVIRONMENT

R43 - May cause sensitization by skin contact.

R 50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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4. FIRST AID MEASURES

Symptoms of poisoning: There is not known any symptoms of poisoning.

Eye Contact: Wash eyes with plenty of water for 15 min. consult an eye specialist.

Skin contact: Wash off with soap and water.

If inhaled: Move patient to fresh and well-ventilated area, do not puke, and call a doctor.

If swallowed: Consult to doctor with the product label and MSDS document. Do not puke.

Antidote and Necessary Information: There is no special antidote. Symptomatic treatment is applied.

5. FIRE FIGHTING MEASURES

Fire extinguishing appliance: Pressed water, CO₂, extinguisher powder, foam, sand. Get intervene to extinguish the fire until a serious danger occurs. Alcohol resistant foams (ATC type) can be used. Water jet should not be used.

In areas which is well-ventilated: Full face mask with combined filters

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.

Spill Clean-up Procedure: Collect the product with a liquid retaining material (e.g. sand, sawdust, chemical binders). 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.

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Additional Measures: Look section 7 for safe use, section 8 for personal protective equipment. Look section 13 for disposal.

7. HANDLING AND STORAGE

Handling : Please use the personal protection equipment specified under Section 8. Do not eat or drink while handling the product. Avoid contact with the mouth, the skin or the eyes. Do not inhale the product. After handling the product thoroughly you're your hands. When handling closed containers no additional safety precautions other than the specified ones are needed. Only handle the product in rooms with a local suction device.

Storage : Please store the product in its original container, in a cool, dry and well-ventilated place. Keep away from food, drink and animal feed items. Protect from exposure to direct sunlight. Protect against freezing. Keep the product away from the reach of children.

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 Protection: 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.

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Good Hygiene Conditions: Do not eat, drink or smoke while handling the product. Make sure to wash your hands each time before eating, drinking, smoking or going to the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid
Color : Yellow-Brown, clear
Odor : Aromatic
Density : $1.115 \pm 0,05 \text{g/cm}^3$ (20⁰C)
pH : $6.5 \pm 11\%$ (20⁰C)
Flash point : >50 0C (Closed container)

10. STABILITY AND REACTIVITY

Conditions to avoid : Extreme temperatures and exposure to direct sunlight

Materials to avoid : Strong acids and alkenes.

Hazardous reactions: When stored and handled appropriately no hazardous reactions are observed.

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11. TOXICOLOGICAL INFORMATION

S-metolachlor Technical Material

Oral Acute oral LD₅₀ for rats 2600 mg/kg.

Skin and eye Acute dermal LD₅₀ for rabbits >2000 mg/kg. Non-irritant to skin and eyes (rabbits). May cause sensitisation by skin contact (guinea pigs).

Inhalation LC₅₀ (4 h) for rats >2910 mg/m³.

NOEL (1 y) for dogs 9.7 mg/kg b.w. daily (*EU Rev. Rep.*).

ADI/RfD (EC) 0.1 mg/kg b.w. [2005].

Toxicity Class WHO (a.i.) III (company classification).

EC classification Xi; R43| N; R50, R53

Benoxacor Technical Material

Oral Acute oral LD₅₀ for rats >5000 mg/kg b.w.

Skin and eye Acute percutaneous LD₅₀ for rabbits >2010 mg/kg b.w. Non-irritating to skin and eyes (rabbits). May cause skin sensitisation (guinea pigs).

Inhalation LC₅₀ (4 h) for rats >2.0 mg/l air.

NOEL (2 y) for rats 0.5 mg/kg b.w. daily.

ADI/RfD (EPA) cRfD 0.004 mg/kg b.w. [1998]; (company value) 0.005 mg/kg b.w.

Toxicity Class WHO (a.i.) U.

EC classification (R43)

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12. ECOLOGICAL INFORMATION

S-metolachlor Technical Material

Birds Acute oral LD₅₀ for bobwhite quail and mallard ducks >2510 mg/kg. Dietary LC₅₀ (8 d) for bobwhite quail and mallard ducks >5620 ppm.

Fish LC₅₀ (96 h) for rainbow trout 1.23, bluegill sunfish 3.16 mg/l.

Daphnia LC₅₀ (48 h) 11.24–26.00 mg/l.

Algae E_bC₅₀ (120 h) for *Selenastrum capricornutum* 0.008, *Skeletonema costatum* 0.11 mg/l. **Other aquatic spp.** LC₅₀ (96 h) for mysid shrimps (*Mysidopsis bahia*) 1.4 mg/l. E_dC₅₀ (14 d) for *Lemna gibba* 0.023 mg/l. (EU Rev. Rep.).

Bees LD₅₀ (oral) >0.085 mg/bee; (contact) >0.2 mg/bee.

Worms LC₅₀ (14 d) for earthworms 570 mg/kg soil.

Benoxacor Technical Material

Birds Acute oral LD₅₀ for mallard ducks >2150, bobwhite quail >2000 mg/kg b.w.

Fish LC₅₀ (96 h) for rainbow trout 2.4, carp 10, bluegill sunfish 6.5, catfish 1.4 mg/l.

Daphnia EC₅₀ (48 h) 11.5 mg/l.

Algae EC₅₀ (72 h) for green algae (*Scenedesmus subspicatus*) 0.63 mg/l; EC₅₀ (96 h) for blue algae (*Microcystis aeruginosa*) 39 mg/l, diatom (*Navicula pelliculosa*) 15.7 mg/l.

Bees LD₅₀ (48 h) (oral and contact) >100 µg/bee.

Worms LC₅₀ (14 d) for earthworms >1000 mg/kg

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13. DISPOSAL CONSIDERATIONS

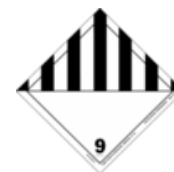
Product: Do not dispose product waste together with household wastes. Waste residue should not be spilled into wastewater canals. Any product wastes should be disposed of in compliance with Hazardous Wastes Control Regulations.

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 Environmental hazardous substance, liquid, N.O.S.
(CONTAINS S-METOLACHLOR VE BENOXACOR)



IMDG

UN-No. : 3082
Class : 9
Packing Group : III
Marine Pollutant : Yes
Product type : UN 3082 Environmental hazardous substance, liquid, N.O.S.
(CONTAINS S-METOLACHLOR VE BENOXACOR)

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IATA

UN-No. : 3082

Class : 9

Packing Group : III

Product type : UN 3082 Environmental hazardous substance, liquid, N.O.S.
(CONTAINS S-METOLACHLOR VE BENOXACOR)

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 Marks and Symbols:



Xi: Irritant



N: DANGEROUS FOR THE ENVIRONMENT

Hazardous Materials Listed on the Label

Contains S-metolachlor ve Benoxacor

Risk Phrases:

Physicochemical-

Health:

R43 - May cause sensitisation by skin contact.

Environment

R 50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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Safety Phrases:

S 1/2 - Keep locked up and out of the reach of children.

S 24 - Avoid contact with skin

S 29 - Do not empty into drains

S 36 - Wear suitable protective clothing

S 37 - Wear suitable gloves

S 46 - If swallowed, seek medical advice immediately and show this container or label

S 56 - Dispose of this material and its container to hazardous or special waste collection point

Important Labelling:

Follow instructions to avoid personal and environmental risks.

16. OTHER INFORMATION

Xn: Harmful

Xi: Irritant

N: Dangerous for the environment

All Risk Phrases under Section 2:

R10 - Flammable.

R 20/21 - Harmful by inhalation and in contact with skin.

R38 - Irritating to skin.

R43 - May cause sensitization by skin contact.

R 50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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Prepared By : Remzican KARAN

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.