

## PRODUCT SAFETY DATA SHEET

**SUBSTANCE / PREPARATION NAME**

**SENETORIN**

Date of preparation	08/03/2016
Release Date	08/03/2016
MSDS No	FORM_MSDS_R&D_281_00
Renewal Date/No	

Page No: 1/10

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

#### 1.1 Substance/ Presentation Of The Preparation:

**Product Name** : SENETORIN  
**Content** : 480 g/L Mesotrione  
**Formulation Type** : SC (Suspension Concentrate)

**Cas No** : 104206-82-8  
**EC No** : -  
**FRAC** : F2 WSSA 27 triketone

#### 1.2 Usage of Substance/Preparation

Herbicide

#### 1.3 Firm Presentation of the Company:

##### Manufacturer and Licensee Company:

**Company Name:** AGRİ SCIENCES TARIM VE İLAÇ ÜR. SAN. TİC. LTD. ŞTİ.

**Address** : Bekir Saydam Caddesi No: 45 Pancar Torbalı / İZMİR

**Telephone** : +90 0232 864 13 33

**Fax** : +900232 864 16 79

#### 1.4 Emergency Telephone:

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

## PRODUCT SAFETY DATA SHEET

**SUBSTANCE / PREPARATION NAME**

**SENETORIN**

Date of preparation	08/03/2016
Release Date	08/03/2016
MSDS No	FORM_MSDS_R&D_281_00
Renewal Date/No	

Page No: 2/10

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).

### 2. INFORMATION ABOUT THE CONTENT/COMPOSITION :

Substance	g/L	CAS No	EINECS/ELINCS	Hazard	R <sup>1</sup>	Classification
Mesotrione	480	104206-82-8	-	N	R50/53	N; R50/53
Mono Etilen Glikol	80	107-21-1	203-473-3	Xn	R22	-
Others <sup>2</sup>	• It's out of classification in that does not contain dangerous substances.					

- Descriptions about <sup>1</sup>R are given in chapter 16

### 3. IDENTIFICATION OF HAZARDS:



#### **N: Dangerous for the Environment**

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

### 4. FIRST AID MEASURES:

**User Safety:** Please wash your face and hands before eating, drink or smoking anything. If you feel unwell immediately stop the work and take first aid measures. After the work is completed thoroughly clean the protective equipment, and wash part of body which came into contact with the product.

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<b>SUBSTANCE / PREPARATION NAME</b>	<b>SENETORIN</b>
Date of preparation	08/03/2016
Release Date	08/03/2016
MSDS No	FORM_MSDS_R&D_281_00
Renewal Date/No	

Page No: 3/10

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).

**Symptoms Of Poisoning:** Headache, weakness and nausea

**First Aid Measures:** In case you or another feel unwell or poisoned immediately stop the work. Avoid further contact with the product. Any coveralls, clothes etc. which came into contact with the pesticide should be removed and any parts of the body which came into contact with the pesticide should be washed with plenty of soap and water. In case there was any pesticide contact with eyes, wash the eyes with plenty of slowly flowing clean water for 15 minutes. If necessary contact a physician. Or take the patient to a physician and show this container or label. Do not give anything orally to the patient in case the patient is unconscious.

**Antidote and Treatment:** There is no special antidote for the product. It should be treated in accord with symptoms.

### 5. FIRE FIGHTING MEASURES

**Personal Protective Equipment:** Do not inhale the fumes generated during the explosion or fire. If available, use air-independent respiratory mask during the fire.

**Dangers:** Consider the dangerous fumes such as hydrogen chloride or carbon monoxide generated during the fire.

**Extinguishers:** Foam, CO<sub>2</sub>, fire extinguishing powder.

**Other Details:** Take the product away from fire place. Cool the containers with water. If available, use earth or sand after using fire extinguishing water.

### 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.

## PRODUCT SAFETY DATA SHEET

SUBSTANCE / PREPARATION NAME	SENETORIN
Date of preparation	08/03/2016
Release Date	08/03/2016
MSDS No	FORM_MSDS_R&D_281_00
Renewal Date/No	

Page No: 4/10

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).

**Clean-up Methods:** The spilled material should be collected with a liquid absorbent material (for instance; absorbent sand, sawdust, chemical binder). Place the product into tightly sealed plastic containers and store it in a safe place until it is disposed. Contaminated materials and surfaces should be cleaned in compliance with environmental regulations. The spilled material should be prevented from reaching sewage and running water. If waste is mixed with water, the authorities must be notified.

**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 contact with mouth, skin and eyes. Do not inhale. Thoroughly wash your hands after using. Other security precautions are not required other than warnings stated regarding use of closed package. Only use in closed spaces where there is a local aspiration device

**Storage** : Keep in original package in a cool, dry and well ventilated place. Keep away from food and animal feed items. Keep away from direct sunlight. Protect against freezing. Keep it 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.

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**SUBSTANCE / PREPARATION NAME**

**SENETORIN**

Date of preparation	08/03/2016
Release Date	08/03/2016
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Renewal Date/No	

Page No: 5/10

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).

**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** : Viscose Liquid  
**Color** : Beige-White  
**Odor** : Characteristic  
**pH** :  $3.8 \pm 1$  (10% distilled water) (20°C)  
**Density** :  $1.2 \pm 0,05$  g/cm<sup>3</sup> (20°C)

### 10. STABILITY AND REACTION

**Conditions to avoid:** Extreme heat and light

**Material to avoid:** Strong acids and alkaline.

**Hazardous reactions:** No / No hazardous reactions if stored and handled as described.  
Toxic and irritant vapor can be occurred because of the thermal decomposition.

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SUBSTANCE / PREPARATION NAME	SENETORIN
Date of preparation	08/03/2016
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MSDS No	FORM_MSDS_R&D_281_00
Renewal Date/No	

Page No: 6/10

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).

### 11. TOXICOLOGICAL INFORMATION

#### Mesotrione Technical Substance:

**Oral** Acute oral LD<sub>50</sub> for male and female rats >5000 mg/kg.

**Skin and eye** Acute percutaneous LD<sub>50</sub> for male and female rats >2000 mg/kg. Non-irritant to skin and eyes (rabbits). Not a skin sensitiser (guinea pigs).

**Inhalation** LC<sub>50</sub> (4 h) for male and female rats >5 mg/l.

**NOEL** (90 d) for rats 0.24, for mice 61.5 mg/kg b.w. daily; (2 y) for rats 7.7 mg/kg b.w. daily; (multi-generation reproduction) for mice 1472, for rats 0.3 mg/kg b.w. daily.

**ADI/RfD** (EC) 0.01 mg/kg b.w.; aRfD 0.02 mg/kg b.w. [2003]. (EPA) cRfD 0.007 mg/kg [2001]. **EC classification** N; R50, R53

### 12. ECOLOGICAL INFORMATION

#### Mesotrione Technical Substance:

**Birds** Acute oral LD<sub>50</sub> for bobwhite quail >2000 mg/kg. Dietary LC<sub>50</sub> for bobwhite quail and mallard ducks >5200 mg/kg.

**Fish** LC<sub>50</sub> (96 h) for bluegill sunfish and rainbow trout >120 mg/l.

**Daphnia** LC<sub>50</sub>/EC<sub>50</sub> (48 h, static) >900 mg/l.

**Algae** LC<sub>50</sub>/EC<sub>50</sub> (120 h, static) for *Selenastrum capricornutum* 3.5 mg/l.

**Other aquatic spp.** LC<sub>50</sub> (14 d) for *Lemna gibba* 0.0077 mg/l.

**Bees** LD<sub>50</sub> (oral) >11 µg/bee; (contact) >9.1 µg/bee, based on 100 g/l formulation (*EU Rev. Rep.*). **Worms** NOEL ≥1000 mg/kg.

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<b>SUBSTANCE / PREPARATION NAME</b>	<b>SENETORIN</b>
Date of preparation	08/03/2016
Release Date	08/03/2016
MSDS No	FORM_MSDS_R&D_281_00
Renewal Date/No	

Page No: 7/10

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).

### 13. DISPOSAL INFORMATION

**Product** : Wastes should dispose of with household waste. The remaining amount of waste must not poured to sewage canal. Hazardous waste should be disposed of according to control regulation.

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

### 14. TRANSPORT INFORMATION

#### ADR/RID/ADNR

**UN-No.** : 3082

**Danger Signal** : 9

**Packaging Group** : III

**Property of the product** : UN 3082 ENVIRONMENTAL HAZARDOUS  
SUBSTANCE, LIQUID N.O.S. (CONTAINING MESOTRIONE)



#### IMDG

**UN-No.** : 3082

**Danger Signal** : 9

**Packaging Group** : III

**Sea Pollutant** : Yes

**Property of the product** : UN 3082 ENVIRONMENTAL HAZARDOUS  
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Renewal Date/No	

Page No: 8/10

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).

### IATA

**UN-No.** : 3082

**Class** : 9

**Packaging Group** : III

**Property of the product** : UN 3082 ENVIRONMENTAL HAZARDOUS  
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### 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:



**N: Dangerous for the environment**

#### Hazardous Substances Found On The Label:

Containing Mesotrione.

#### Risk Phrases

#### Health:-

#### Environment:

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



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Renewal Date/No	

Page No: 9/10

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).

### Safety Phrases

**S1/2:** Keep locked up and out of the reach of children

**S29:** Do not empty into drains

**S56:** Dispose of this material and its container at hazardous or special waste collection point

### Important Labeling :

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

## 16. OTHER INFORMATIONS

**N: DANGEROUS FOR THE ENVIRONMENT**

**Xn: HARMFUL**

### Risk phrases mentioned in Section 2:

**R22:** Harmful if swallowed

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

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MSDS No	FORM_MSDS_R&D_281_00
Renewal Date/No	

Page No: 10/10

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**Renewal Date/No** :-  
**Prepared By** : Beril TEMREN

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.