

# MATERIAL SAFETY DATA SHEET

**SUBSTANCE / PREPARATION NAME**

**SURAGE**

Date of preparation	23/07/2015
ReleaseDate	23/07/2015
MSDS No	FORM_MSDS_R&D_206_00
RenewalDate/No	

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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** : SURAGE  
**Content** : Sulfosulfuron 75 %  
**Formulation Type** : WG (Water dispersible granules)

#### Sulfosulfuron

**CAS No** : 141776-32-1  
**EC No** :-  
**HRAC** : 2 sulfonylurea

### 1.2 Usage of Substance/Preparation:

Herbicide

### 1.3 Firm Presentation of the Company:

#### **Manufacturer and License Company:**

**Company Name** : AGRİ SCIENCES TARIM VE İLAÇ ÜR. SAN. TİC. LTD. ŞTİ.  
**Address** : 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 and/or National Poison Information Center 114 in case of emergency.

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## 2. INFORMATION ABOUT THE CONTENT/COMPOSITION

Substance	%	CAS No	EINECS/ELINCS	Hazard	R <sup>1</sup>	Classification
Sulfosulfuron	75	141776-32-1	-	N	R50/53	N; R50/53
Others	It's out of classification in that does not contain dangerous substances.					

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

## 3. IDENTIFICATION OF HAZARDS



**N: Dangerous For the Environment**

**R50/53:** May cause long-term adverse effects in aquatic environments.

## 4. FIRST AID MEASURES

**General Suggestion:** In case of emergency, call a doctor; take the pesticide label with you.

**Eye Contact:** Wash eyes with plenty of water.

**Skin contact:** Wash off with soap and water.

**If inhaled:** Move patient to fresh and well-ventilated area, call a doctor.

**If swallowed:** If patient is not unconscious, the mouth should be rinsed. Do not give anything oral.

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## 5. FIRE-FIGHTING MEASURES

**Suggestion for the fire department:** Use full mask with oxygen tube if required.

**Hazards:** Formation of dangerous gases as carbon oxides (CO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>) and sulfur oxides is taken into account in case of fire.

**Fire extinguishers:** Water mist, foam, carbon dioxide, extinguishing powder.

## 6. ACCIDENTAL RELEASE PRECAUTIONS

**Personal Alerts:** Use personal protective equipment specified in section 8.

Avoid contact with spilled product or contaminated areas. Do not eat, drink or smoke when dealing with spilled product. Avoid dust formation.

**Environmental Precautions:** If there is no safety hazard, avoid the leakage. The remaining amount of waste must not be poured into sewage canal.

**The Cleaning Process:** Spilled material should be collected by sweeping and filled into suitable containers.

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

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin and eyes. Do not breathe it. Wash your hands after usage.

**Storage:** Store in original container in a cool, dry and well-ventilated place.

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## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

**Engineering Precautions:** Keep the substance concentration below the allowable limits by providing the appropriate general or regional ventilation. Wash your hands before and after using.

### Personal Protective Equipment:

**Eye** : Use safety glasses according to NIOSH (US) and 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) according to EN 374 standards. Wash contaminated gloves. Dispose of the not cleanable gloves. Take off the gloves by holding from the exterior surface.

**Respiration** : Use breathing apparatus according to N95 or P1 (EN 143). Warning instructions prepared by manufacturers about respiratory protection apparatus must be followed.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : Solid, Granule

**Color** : Beige, brown

**Odor** : Odorless

**pH** :  $6 \pm 110\%$  (20°C)

**Density** :  $0.6 \pm 0.05 \text{g/cm}^3$  (20°C)

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## 10. STABILITY AND REACTION

**Conditions to avoid** : Direct sunlight and extreme temperatures.

**Hazardous reactions** : Strong oxidizing agent.

## 11. TOXICOLOGICAL INFORMATION

### Sulfosulfuron Technical Substance:

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

**Skin and eye** Acute percutaneous LD<sub>50</sub> for rats >5000 mg/kg. Not a skin irritant; moderate eye irritant (rabbits). Not a skin sensitiser (guinea pigs).

**Inhalation** Practically non-toxic.

**NOEL** (2 y) for rats 24.4–30.4 mg/kg b.w. daily; (90 d) for dogs 100 mg/kg b.w. daily; (18 mo) for mice 93.4–1388.2 mg/kg b.w. daily.

**ADI/RfD** (EC) 0.24 mg/kg b.w. [2002].

**Other** Negative in Ames, CHO/HGPRT, *in vitro* chromosomal (Chinese hamster), *in vitro* cultured human lymphocytes and mouse micronucleus tests.

**Toxicity Class** EPA (formulation) III

**EC classification** N; R50, R53

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## 12. ECOLOGICAL INFORMATION

### Sulfosulfuron Technical Substance:

**Birds** Acute oral LD<sub>50</sub> for bobwhite quail and mallard ducks >2250 mg/kg. Dietary LC<sub>50</sub> (5 d) for bobwhite quail and mallard ducks >5620 ppm.

**Fish** LC<sub>50</sub> (96 h) for rainbow trout >95, carp >91, bluegill sunfish >96, sheepshead minnows >101 mg/l.

**Daphnia** EC<sub>50</sub> (48 h) >96 mg/l.

**Algae** E<sub>b</sub>C<sub>50</sub> (3 d) for green algae (*Selenastrum capricornutum*) 0.221 mg/l, E<sub>r</sub>C<sub>50</sub> (3 d) 0.669 mg/l; EC<sub>50</sub> (5 d) for blue-green algae (*Anabaena flos-aquae*) 0.77 mg/l; EC<sub>50</sub> (5 d) for diatoms (*Navicula pelliculosa*) >87, marine algae (*Skeletonema costatum*) >103 mg/l.

**Other aquatic spp.** IC<sub>50</sub> (14 d) for *Lemna gibba* (G3) >1.0 µg/l. EC<sub>50</sub> (96 h) for shrimps (*Mysidopsis bahia*) >106 mg/l.

**Bees** LD<sub>50</sub> (oral) >30 µg/bee; (dermal) >25 µg/bee.

**Worms** LC<sub>50</sub> (14 d) >848 mg/kg soil.

## 13. DISPOSAL INFORMATION

**Product:** Hazardous waste that cannot be recovered should be disposed of according to control regulation. Agree with one of the waste disposal firm. Solve the material with a combustible solvent or mixed with this solvent and burn in a combustion furnace.

**Contaminated Packing:** Dispose the waste as an uncontaminated packaging.

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## 14. TRANSPORT INFORMATION

### ADR/RID/ADNR

**UN-No.** : 3077

**Danger Signal** : 9

**Packaging Group** : III

**Property of the Product** : UN 3077 Environmental hazardous substance, solid N.O.S. (CONTAINS SULFOSULFURON)



### IMDG

**UN-No.** : 3077

**Class** : 9

**Packaging Group** : III

**Sea Pollutant** : Yes

**Property of the Product** : UN 3077 Environmental hazardous substance, solid N.O.S. (CONTAINS SULFOSULFURON)

### ADR/RID/ADNR

**UN-No.** : 3077

**Danger Signal** : 9

**Packaging Group** : III

**Property of the Product** : UN 3077 Environmental hazardous substance, solid N.O.S. (CONTAINS SULFOSULFURON)

## 15. REGULATORY INFORMATION

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### Hazard Signal and Symbol:



**N: Dangerous For the Environment**

### Hazardous Substances Found On the Label:

Contains sulfosulfuron.

### Risk Phrases

**Physicochemical: -**

**Health:-**

**Environment:**

**R50/53:** May cause long-term adverse effects in aquatic environments.

### Safety Phrases

**S 60:** This material and its container must be disposed of as hazardous waste

**S 61:** Avoid release to the environment. Refer to special instructions/safety data sheet.

### Important Labelling:

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



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### 16. OTHER INFORMATIONS

**N:** Dangerous For the Environment

**All Risk phrases mentioned in Section 2:**

**R50/53:** May cause long-term adverse effects in aquatic environments.

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**Prepared By** : Remzican KARAN

This security information form is additional to manufacturer firm's instructions, however does not replace with instructions. This form contains regulation criteria 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.