

## PRODUCT SAFETY DATA SHEET

**SUBSTANCE / PREPARATION NAME**

**CLOOP**

|                     |                      |
|---------------------|----------------------|
| Date of preparation | 23/07/2015           |
| Release Date        | 23/07/2015           |
| MSDS No             | FORM_MSDS_R&D_201_00 |
| Renewal Date/No     |                      |

Page No: 1/8

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** : CLOOP  
**Product Description** : Clethodim 240 g/L  
**Formulation Type** : EC (Concentrated Emulsion)  
**CAS No** : 99129-21-2  
**EC No** : -  
**HRAC** : Cyclohexanedione oxime

#### 1.2 Usage of Substance/Preparation:

Herbicide

#### 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 +90 232 864 13 33 and/or National Poisoning Information Centre 114 in an emergency.

## PRODUCT SAFETY DATA SHEET

|                                     |              |
|-------------------------------------|--------------|
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Page No: 2/8

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).

### 2. INFORMATION ABOUT THE CENTENT / COMPOSITION

| Substance | g/L   | CAS No     | EINECS/ELINCS | Hazard | R <sup>1</sup>      | Classification                 |
|-----------|---|------------|---------------|--------|---------------------|--------------------------------|
| Clethodim | 240   | 99129-21-2 |               | Xn, N  | R22, R51/53         | Xn; R22<br>R51/53              |
| Xylene    | >500  | 1330-20-7  | 215-535-7     | Xn, Xi | R10, R20/21,<br>R38 | R10,<br>Xn; R20/21,<br>Xi; R38 |
| Others    | These are excluded because of not containing hazardous substance. |            |               |        |                     |                                |

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

### 3. IDENTIFICATION OF HAZARDS



**Xn: Harmful**



**N: Dangerous For the Environment**

**R10** : Flammable.

**R20/21** : Harmful, if inhaled and contact with skin.

**R22** : Harmful if swallowed.

**R51/53** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. FIRST AID MEASURES

**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

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| Renewal Date/No     |                      |

Page No: 3/8

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).

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-FIGHTING MEASURES

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

### 6. ACCIDENTAL RELEASE MEASURES

**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.

**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 equipment 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.

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| Renewal Date/No     |                      |

Page No: 4/8

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).

**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.

The storage temperature 0-30° C

### 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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : Liquid, clear

**Color** : Yellow to Brown

**Odor** : Aromatic

**Density** : 0,95±0,05 g/cm<sup>3</sup> (20<sup>0</sup>C)

**pH** : 4,5 ± 1 (1% solution at 20<sup>0</sup>C)

**Flash Point** : 28 ± 5<sup>0</sup>C (Closed cup)

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| Renewal Date/No     |                      |

Page No: 5/8

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).

### 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

#### **Clethodim Technical Substance:**

**Oral** Acute oral LD<sub>50</sub> for male rats 1630, female rats 1360, male mice 2570, female mice 2430 mg/kg. **Skin and eye** Acute percutaneous LD<sub>50</sub> for rabbits >5000 mg/kg. Moderate skin irritant (rabbits). Not a skin sensitiser (guinea pigs). **Inhalation** LC<sub>50</sub> (4 h) for rats >3.9 mg/l (total aerosol). **NOEL** for mice 30, rats 16, dog 1 mg/kg b.w. daily.

**ADI/RfD** (JMPR) 0.01 mg/kg b.w. [1999]; (EPA) 0.01 mg/kg [1998]; (Canada) 0.16 mg/kg.

### 12. ECOLOGICAL INFORMATION

#### **Clethodim Technical Substance:**

**Birds** Oral LD<sub>50</sub> for bobwhite quail >2000 mg/kg. Dietary LC<sub>50</sub> for mallard ducks >6000 mg/kg. **Fish** LC<sub>50</sub> (96 h) for rainbow trout 67, bluegill sunfish >120 mg/l. **Daphnia** LC<sub>50</sub> (48 h) >120 mg/l; NOEC 60 mg/l. **Algae** EC<sub>50</sub> (5 d) for fresh-water algae 57.8 mg/l.

**Bees** LD<sub>50</sub> (contact) >100 µg/bee. **Worms** LC<sub>50</sub> for worm 454 mg/kg soil; NOEL 316 mg/kg soil.

### 13. DISPOSAL INFORMATION

**Product:** Wastes should disposed 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.

## PRODUCT SAFETY DATA SHEET

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|                     |                      |
|---------------------|----------------------|
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| MSDS No             | FORM_MSDS_R&D_201_00 |
| Renewal Date/No     |                      |

Page No: 6/8

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).

**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.** : 1993

**Hazard Signal** : 3

**Packaging Group** : III

**Description of the goods:** UN 1993 FLAMMABLE LIQUID N.O.S. (CONTAINING CLETHODIM and XYLENE)

**UN-No.** : 1993

**Class** : 3

**Packaging Group** : III

**EMS** :

**Marine Pollutant** : Yes

**Description of the goods:** UN 1993 FLAMMABLE LIQUID N.O.S. (CONTAINING CLETHODIM and XYLENE)

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**UN-No.** : 1993

**Class** : 3

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| Renewal Date/No     |                      |

Page No: 7/8

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).

### 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

Contains Clethodim and Xylene.

#### Risk Phrases

##### Physicochemical:

R10 : Flammable.

##### Health:

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

R22 : Harmful if swallowed.

R38 : Irritating the skin.

##### Environment: -

R51/53 : 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.

S13 : Keep away from foods, drinks and animal feedstuffs

S17 : Keep away from combustible material

S37 : Wear suitable gloves

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Page No: 8/8

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).

S46 : If swallowed, seek medical advice immediately, show the container or label.

S64 : If swallow, rinse mouth with water (Only if the person is conscious).

### **Important Labelling:**

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

Toxicity class WHO (a.i.) II

## **16. OTHER INFORMATIONS**

**Xi** : Irritant

**Xn** : Harmful

**N** : Dangerous for the environment

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

R10 : Flammable

R22 : Harmful if swallowed.

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

R38 : Irritating the skin.

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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**Date of Renewal/No :-**

**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.



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| Renewal Date/No     |                      |

Page No: 9/8

TE This form is based on SAFETY DATA FORMS AND REGULATION ABOUT THE PREPARATION AND DISTRIBUTION OF  
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