Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 1/10

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 : LEKO

Procuct Content : Oxadiazon 250 g/L

Formulation Type : EC (Emulsion Concantrate)

CAS No : 19666-30-9 **EC No** : 243-215-7

HRAC : E WSSA 14 oxadiazole

1.2 Usage of the Material/Preparation:

Herbicide

1.3 Company Identification

Manufacturing and License Holding Company:

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

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

Telephone : +90 0232 864 13 33 **Fax** : +900232 864 16 79

1.4 Emergency Contact Telephone:

In case of an emergency please call +90 0232 864 13 33 and National Poison Information Centre (UZEM) 114.

Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 2/10

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).

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Material	g/L	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Oxadiazon	250	19666-30-6	243-215-7	N	R50/53	N;R50/53
Xylene	>500 g/L	1330-20-7	215-535-7	Xn, Xi	R10, R20/21, R38	R10, Xn R20/21, XiR38
Others Not classified in that it does not include hazardous chemicals.						

 ¹ R explanations are under section 16.

3. HAZARD IDENTIFICATION





Xn: Harmful

N:Dangerous for the Environment

R10 : Flammable.

R20/21 : Harmful by inhalation and in contact with skin.

R38 : Irritating to skin.

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

the aquatic environment.

4. FIRST AID MEASURES:

Poisoning Symptoms: Headache, dizziness, weakness, visual impairment, blurred vision, swelter, irascibleness, diarrhea, dyspnoea, saliva, vomiting, cyanosis, pupil constriction, tremble, spasm and reflex distortion.

Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 3/10

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).

First Aid Measures: If inhaled do not make puke, seek medical advice immediately. In case of contacting with eyes or skin wash with plenty of water at least 15 minutes.

Antidote and Necessary Information: Atropin Sulfate and Toxogonin. According to severity of poisoning, Atropin Sulfate can be given from beginning 2-3 mg to 100 mg.

5. FIRE FIGHTING MEASURES

Personal protection equipment for fire-fighting: Do not breathe gases which evolve during explosion and fire. If possible use air independent respirator during fire.

Dangers: Occurring dangerous gases during fire should be considered.

Extinguishers: Foam, CO₂ and fire-extinguishing powder

Other Information: Take away the product from fire area, cool containers with water. If possible after extinguishing use sand or soil.

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.

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

Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 4/10

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).

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. Storage temperature 30^{0} C

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 Protection: Use eye protection equipment compliant with EN 166.

Skin Protection: 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.

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.

Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 5/10

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).

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid, clear
Color : Yellow to Brown

Odor : Aromatic

Density : $0.98\pm0.05 \text{ g/cm}^3 (20^{\circ}\text{C})$

pH : 6 ± 1 , 1% (20⁰C)

Flash Point : 28 ± 5 °C.

10. STABILITY AND REACTIVITY

Conditions to avoid : Extremly temperature and direct sunlight exposure.

Substances to avoid : Keep away from strong acid and base

Dangerous Reactions: Dangerous reaction does not occur in proper storage and usage. Durable for described storage conditions. Does not occur dangerous polymerization

products.

11. TOXICOLOGICAL INFORMATION

Oxadiazon Technical Material:

Acute Oral LD₅₀ rat > 5000 mg/kg.

Skin and Eye acute percutation Deri ve göz: Akut percutaneous LD_{50} rabbit >2000 mg/kg. Slightly eye irritant and skin irritation is negligible on rabbit.

Raspitation LC₅₀ rat 2,77 mg/L

NOEL (2 year) rat 10 mg/kg diet (0. 5 mg/kg b.w.in a day).

ADI/RfD (EC) 0.036 mg/kg b.w. [2008]; (EPA) no food uses, so RfD not required, but

EPA states that values would be: aRfD 0.12, cRfD 0. 0036 mg/kg b.w. [2004].

Toxicity Class: WHO (a.i.) Ia; EPA (formulation) IV

Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 6/10

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).

12. ECOLOGICAL INFORMATION

Oxadiazon Technical Material:

Bird Acute Oral LD₅₀ (24 hours) duck (mallard duck) >1000 mg/kg, quail >2150 mg/kg **Fish** LC₅₀ (96 saat) *rainbow trout* ve *bluegill sunfish* 1,2,

Water flea EC_{50} (48 hours) >2. 4 mg/l.

Alg EC₅₀ 6–3000 μ g/l.

Bee LD₅₀ >400 μ g/, It can be neglicile to dosage of death ratio and direct contact. 27 kg a.i./ha.

Worm Not hazardous if followed the instructions.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: 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. : 1993 Class : 3 Packing Group : III

Product Type: UN 1993 FLAMMABLE LIQUID N.O.S. (CONTAINS

OXADIAZON VE KSİLEN)

Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 7/10

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).

IMDG

UN-No. : 1993 Class : 3 Packing Group : III

Product Type : UN 1993 FLAMMABLE LIQUID N.O.S. (CONTAINS

OXADIAZON VE KSİLEN)

Marine Pollutant : Yes

IATA

UN-No. : 1993
Class : 3
Packing Group : III

Product Type :UN 1993 FLAMMABLE LIQUID N.O.S. (CONTAINS

OXADIAZON VE KSİLEN)

15. REGULATORY INFORMATION

This data sheet is 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).

Hazard Marks and Symbols:





Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 8/10

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).

Xn: Harmful N:Dangerous for the Environment

Hazardous Materials Listed on the Label

Contains oxadiazon and ksilen.

Risk Statement

Physicochemical:

R10 : Flammable.

Health:

R20/21 : Harmful by inhalation and in contact with skin.

R38 : Irritating to skin.

Environment:

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

Güvenlik İbareleri:

S2 : Keep out of the reach of children.

S13 : Keep away from food, drink and animal feedingstuffs.

S 29 : Do not empty into drains.

S 36/37 : Wear suitable protective clothing and gloves.

: If swallowed, seek medical advice immediately and show this container or

label.

: If swallowed, rinse mouth with water (only if the person is conscious).

Important Labelling:

Follow the instructions to avoid risks on people and environment.

Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 9/10

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).

16. OTHER INFORMATION

N : Dangerous for the Environment

Xi : Irritant Xn : Harmful

All Risk Phrases under Section 2:

R10 : Flammable.

R20/21 : Harmful by inhalation and in contact with skin.

R38 : Irritating to skin.

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

the aquatic environment.

Hazırlanma Tarihi : 16/09/2015 Yayın Tarihi : 16/09/2015

MSDS No :FORM_MSDS_R&D_254_00

Yenilenme Tarihi/No :

Hazırlayan : Sinem TOKSABAY

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

MATERIAL SAFETY DATA SHEET	
NAME OF MATERIAL/PREPARATION	LEKO

Date of Preparation	16/09/2015
Date of Issue	16/09/2015
MSDS No	FORM_MSDS_R&D_254_00
Renewal Date/No	-

Sayfa No: 10/10

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).

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.