

MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION

LORDER

Date of Preparation	28/07/2015
Date of Issue	28/07/2015
MSDS No	FORM_MSDS_R&D_244_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 : **LORDER**
Product Content : Imidacloprid 125 g/L + Lambda Cyhalothrin 50 g/l
Formulation Form : SC (Suspension Concentrates)

Lambda Cyhalothrin

Cas No : 91465-08-6
EC No : 415-130-7
IRAC : 3A pyrethroid

Imidacloprid

Cas No : 138261-41-3
EC No : 428-040-8
IRAC Smf : 4A neonicotinoid

1.2 Usage of the Material/Preparation:

Insecticide

1.3 Company Identification:

Manufacturing and License Holding Company:

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

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2. COMPOSITION AND INFORMATION ON INGREDIENTS:

Material	g/L	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Imidacloprid	125	138261-41-3	428-040-8	Xn, N	R22, R50/53	N;R51/53
Lambda Cyhalothrin	50	91465-08-6	415-130-7	T+, T,Xn, N	R26, R25,R21 R50/53	T; R26,Xn R25 N; R51/53
Others	Outside classification due to absence of hazardous material.					

- ¹ R explanations are under section 16.

3. HAZARD IDENTIFICATION:



T: TOXIC



N: DANGEROUS FOR THE ENVIRONMENT

R25 : Toxic if swallowed
 R26 : Very toxic by inhalation
 R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES:

Poisoning indicators: Causes mydriasis, impaired concentration in muscles and muscle contraction.

First Aid Measures: In case of contact with eyes: Rinse with plenty of water for at least 15 minutes and seek medical measures.

In case contact with skin: Take out the pesticide contaminated clothes and wash the contacted parts with soap and water.

If inhaled: Take patient to fresh air. Apply artificial respiration if necessary.

If swallowed: Puke the patient by making him/her drink 1-2 glasses of water in case too much exposure with too much pesticide. Do not puke if the patient is unconscious.

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Antidote and Required Information: No any specific antidotes. Symptomatic treatment is followed.

5. FIRE FIGHTING MEASURES

Personal protection equipment for fire fighting: Do not inhale the gases occurred during the explosion and fire. If possible use air-independent respiratory masks.

Hazards: Consider the hazardous gases come out during the fire.

Extinguishers: Foam, Carbon dioxide, fire extinguishing powder.

Other Information: Move the product away from the fire place, cool the containers using water. If possible, use sand and soil after the fire extinguishing liquid.

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. The product is prevented from reaching the drains or rivers. If the waste is mixed with water, the authorities will be notified.

Additional Precautions: Refer to Section 7 for safe handling instructions. Refer to Section 8 for personal protection equipment. Refer to 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.

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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 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: Liquid
Colour	: Beige - white
Odour	: Characteristic
Specific Gravity	: $1,08 \pm 0,05 \text{ g/cm}^3$ (20°C)
pH	: 5 - 9 (% 10 solution)
Viscosity	: 20°C 1000-5000 mps (Brokfield DV-I)

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10. STABILITY AND REACTIVITY

Conditions to avoid: Extreme temperatures and exposure to direct sunlight

Substances to avoid: Keep away from strong acids and bases.

Hazardous reactions: When stored and handled appropriately no hazardous reactions are observed. Toxic and irritant vapours may occur following combustion or thermal decomposition. Durable for described storage conditions . Hazardous polymerization products do not occur.

11. TOXICOLOGICAL INFORMATION

Lambda Cyholothrin Technical Material:

Oral Acute oral LD₅₀ for male rats 79, female rats 56 mg/kg. **Skin and eye** Acute percutaneous LD₅₀ for rats 632–696 mg/kg. Mild eye irritant; non-irritant to skin (rabbits). Not a skin sensitiser (guinea pigs). **Inhalation** LC₅₀ (4 h) for rats 0.06 mg/l air (total particulate). **NOEL** (1 y) for dogs 0.5 mg/kg b.w. daily. **ADI/RfD** (EC) 0.005 mg/kg b.w. [2000]; (EPA) cRfD 0.001 mg/kg b.w. [1997]. **Other** Non-mutagenic in the Ames test. **Toxicity Class** WHO (a.i.) II; EPA (formulation) II

Imidacloprid Technical Substance:

Oral Acute oral LD₅₀ for male and female rats c. 450 mg/kg. **Skin and eye** Acute percutaneous LD₅₀ (24 h) for rats >5000 mg/kg. Non-irritating to eyes and skin (rabbits). Not a skin sensitiser. **Inhalation** LC₅₀ (4 h) for rats >5323 mg/m³ dust, 69 mg/m³ air (aerosol). **NOEL** (2 y) for male rats 5.7, female rats 24.9, male mice 65.6, female mice 103.6 mg/kg b.w. daily; (52 w) for male and female dogs 15 mg/kg b.w. daily. **ADI/RfD** (JMPR) 0.06 mg/kg b.w. [2001]; (EC) 0.06 mg/kg b.w. [2008]; (EPA) aRfD 0.14, cRfD 0.057 mg/kg b.w. [2005] **Other** Not mutagenic or teratogenic. **Toxicity Class** WHO (a.i.) II; EPA (formulation) II

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12. ECOLOGICAL INFORMATION

Lambda Cyhalothrin Technical Material:

Birds Acute oral LD₅₀ for mallard ducks >3950 mg/kg. Dietary LC₅₀ for quail >5300 mg/kg. No accumulation of residues in eggs or tissues. **Fish** LC₅₀ (96 h) for bluegill sunfish 0.21, rainbow trout 0.36 µg/l. **Daphnia** Intrinsic toxicity to aquatic organisms is greatly reduced by rapid loss from the water by adsorption and degradation: EC₅₀ (72 h) in water 0.26 µg/l, in water/sediment 31 µg/l. **Algae** E_rC₅₀ (96 h) for *Selenastrum capricornutum* >1000 µg/l. **Bees** LD₅₀ (oral) 909 ng/bee; (contact) 38 ng/bee. **Worms** LC₅₀ for *Eisenia foetida* >1000 mg/kg soil. **Other beneficial spp.** Toxic to some non-target arthropods. Effects under field conditions reduced, with rapid recovery.

Imidacloprid Technical Substance:

Birds Acute oral LD₅₀ for Japanese quail 31, bobwhite quail 152 mg/kg. Dietary LC₅₀ (5 d) for bobwhite quail 2225, mallard ducks >5000 mg/kg. **Fish** LC₅₀ (96 h) for golden orfe 237, rainbow trout 211 mg/l. **Daphnia** LC₅₀ (48 h) 85 mg/l. **Algae** E_rC₅₀ (72 h) for *Pseudokirchneriella subcapitata* >100 mg/l. **Bees** Harmful to honeybees by direct contact, but no problems expected when not sprayed into flowering crop or when used as a seed treatment. **Worms** LC₅₀ for *Eisenia foetida* 10.7 mg/kg dry soil.

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.

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14. TRANSPORTATION INFORMATION

ADR/RID/ADNR /RID/ADNR

UN-No. : 3252
Class : 6.1
Packing Group : III
Product Type : UN 3252 PYRETHROID PESTICIDE, LIQUID, TOXIC
(CONTAINING IMIDACLOPRID and LAMBDA CYHALOTHRIN)

IMDG

UN-No. : 3252
Class : 6.1
Packing Group : III
EMS :
Marine Pollutant : Yes
Product Type : UN 3252 PYRETHROID PESTICIDE, LIQUID, TOXIC
(CONTAINING IMIDACLOPRID and LAMBDA CYHALOTHRIN)

IATA

UN-No. : 3252
Class : 6.1
Packing Group : III
Product Type : UN 3252 PYRETHROID PESTICIDE, LIQUID, TOXIC
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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:



T: TOXIC N: DANGEROUS FOR THE ENVIRONMENT

Hazardous Materials Listed on the Label

INCLUDES Lambda Cyhalothrin and Imidacloprid.

Risk Phrases:

Physicochemical: -

Health:

R25 : Toxic if swallowed

R26 : Very toxic by inhalation

Environment:

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

Safety Phrases:

S1/2 : Keep locked and away from children.

S4 : Keep away from living quarters

S9 : Keep container in a well-ventilated place

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

S29 : Do not empty into drains

S36 : Wear suitable protective clothing

S45 : Call a doctor if you feel bad or in case of accident.

S56 : Dispose of this material and its container dangerous or special waste collection areas

S63 : In case of inhalation: Take the patient to fresh air and provide him/her resting

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16. OTHER INFORMATION

N : Dangerous for the environment
Xi : Irritating.
Xn : Harmful
T : Toxic
T+ : Too Toxic

All Risk Phrases under Section 2:

R21 : Harmful in contact with skin
R22 : Harmful if swallowed
R25 : Toxic if swallowed
R26 : Very toxic if inhalation
R50/53 : Too toxic for aquatic organisms and may cause long-term adverse effects
in the aquatic environment

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Prepared By : Remzi Can 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.