MATERIAL SAFETY DATA SHEET NAME OF MATERIAL/PREPARATION DERIVATE

Date of Preparation	23/07/2015
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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 : DERIVATE

Product Content : INDOXACARB 150 g/L **Formulation Form** : SC (Suspansion Concentrate)

Cas No : 173584-44-6

EC No :-

IRAC : 22A OXADIAZINE

1.2 Usage of the Material/Preparation:

Insecticide

1.3 Company Identification:

Manufacturing and License Holding Company:

Company Name : AGRI SCIENCES TARIM VE ILAC UR. SAN. TIC. LTD. STI.

Address : BekirSaydamCaddesiPancar No: 31 Torbali / IZMIR

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.

2. COMPOSITION AND INFORMATION ON INGREDIENTS:

Material	g/L	CAS No	EINECS/ELINCS	Hazard	\mathbb{R}^1	Classification
Indoxacarb	150	173584-44-6	-	N	R50/53	N; R50/53
Others Out of classification due to not including dangerous material						

• 1R explanations are under section 16.

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3. HAZARD IDENTIFICATION:



N: Harmful for environment

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

4. FIRST AID MEASURES:

Poison symptoms: A clear poison symptom has not been determined on human.

First Aid Measures: In case of contact with skin, wash with plenty of water. Take off contaminated clothes. In case of contact with eyes, wash with plenty of water for at least 15 minutes. Call a doctor. Take the label and package with you.

Antidote and Necessary Information: There is no antidote. Treatment is applied as per the symptoms.

5. FIRE FIGHTING MEASURES

Personal Protective Equipment during fight: Do not inhale the occurred gases during explosion and fire. Use air-independent respiratory mask during fire if possible.

Dangers: Consider the dangerous gases during the fire.

Extinguishers: Foam, carbon dioxide, extinguishing powder

Other Details: Take the product away from the fire point. Get cool the containers with water. If possible, use sand or earth after 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.

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Clean-up Methods: The poured material is collected with a liquid catcher material (for instance; sucking sand, sawdust, chemical binder). 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 material should not be poured to sewage system or running water. If wastes contaminate the water, the authorized persons are informed.

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 :Please use the personal protection equipment specified under Section 8. Do not eat or drink while using. Prevent the contact with mouth, skin and eyes. Do not inhale. Wash your hands after using. Other security precautions are not required except of stated warnings during using the closed package. Use only in rooms, in which there is a local sucking device.

Storage : Keepin original package in cool, dry and well ventilated places. Keep away from food and animal feed items. Keep away from direct sunlight. Keep against freezing. Keep it in places that children cannot reach. Storage degree $-5 - 40^{\circ}$ 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:

Eve : Useeye protection equipment compliant with EN 166.

Skin: Useprotective 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

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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 : Viscos Liquid
Color : White to beige

Odor : Odorless

Density : $1,03 \pm 0,05 \text{ g/cm}^3 (20^0\text{C})$ **pH** : 3-6 (%1 solution)

10. STABILITY AND REACTIVITY

Conditions to be avoided : Extreme degrees and direct sun light

Materials to be avoided : Keep away from strong acids and basis

Dangerous reaction :There is no dangerous reaction in appropriate storage and usage. Toxic and irritant vapors may occur due to fire and thermal degradation. It is resistant in mentioned storage conditions. No dangerous polymerization products.

11. TOXICOLOGICAL INFORMATION

Oral DPX-MP062: Acute oral LD₅₀ for male rats 1732, female rats 268 mg/kg. **Skin and eye** DPX-MP062: Acute percutaneous LD₅₀ for rabbits >5000 mg/kg. No eye or skin irritation (rabbits). Dermal sensitiser (guinea pigs). **Inhalation** DPX-KN128: LC₅₀ for rats >2 mg/l. **NOEL** DPX-JW062: (90 d) overall systemic NOAEL for rats 10 ppm (0.6 mg/kg b.w. daily) (*EU Rev. Rep.*); (2 y) for male rats 60, female rats 40 ppm; (18 mo) for male and female mice 20 ppm; (1 y) for male and female dogs 40 ppm. **ADI/RfD** (JMPR) 0.01 mg/kg b.w. [2005, 2006]; (EC) 0.006 mg/kg b.w. [2006]; (EPA) lowest aRfD 0.02, cRfD 0.02 mg/kg [2000]. **Other** Negative in the Ames test.

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12. ECOLOGICAL INFORMATION

Birds DPX-MP062: Acute oral LD₅₀ for bobwhite quail 98 mg/kg. Dietary LC₅₀ (5 d) for mallard ducks >5620, bobwhite quail 808 ppm. **Fish** DPX-MP062: LC₅₀ (96 h) for bluegill sunfish 0.9, rainbow trout 0.65 mg/l. **Daphnia** DPX-MP062: LC₅₀ (48 h) 0.60 mg/l. **Algae** DPX-MP062: EC₅₀ (96 h) >0.11 mg/l (*EU Rev. Rep.*). **Bees** DPX-MP062: LD₅₀ (oral) 0.26 µg/bee; (contact) 0.094 µg/bee. (*EU Rev. Rep.*). **Worms** DPX-MP062: LC₅₀ (14 d) >1250 mg/kg. **Other beneficial spp.** DPX-KN128 had little or no adverse effects on 4 species at 30–50 g/ha; more extended studies on *Episyrphus balteatus* and *Typhlodromus pyri* described (M. Mead-Briggs *et al.*, *Proc. Br. Crop Prot. Conf. - Pests Dis.*, 1996, 1, 307).

13. DISPOSAL INFORMATION

Product: Do not dispose it 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. : 3082

Hazard Mark: 9

Packing Group : III

Product type :UN3082ENVIRONMENTAL HARMFUL MATERIAL, LIQUID

N.O.S. (INCLUDES INDOXACARB)

IMDG

UN-No. : 3082
Class : 9
Packing Group : III
EMS :

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Marine Pollutant: Yes

Product type :UN 3082 ENVIRONMENTAL HARMFUL MATERIAL, LIQUID N.O.S. (INCLUDES INDOXACARB)

IATA

UN-No. : 3082 Class : 9 Packing Group : III

Product type :UN 3082 ENVIRONMENTAL HARMFUL MATERIAL,

LIQUID N.O.S. (INCLUDES INDOXACARB)

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:



N:Dangerous for Environment

Hazardous Materials Listed on the Label

Includes INDOXACARB

Risk Phrases:
Physicochemical:Health :Environment:

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

effects in the aquatic environment

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Safety Phrases:

S1/2 : Keep it locked and a place where children cannot reach

S13 :Keep away from food, drink and animal feed

S29 : Do not empty into drains

S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection

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

collection areas.

S61 : Avoid release to the environment. Refer to special instructions/safety

data sheet

Important Labeling:

Follow instructions to avoid personal and environmental risks.

16. OTHER INFORMATION

N :Dangerous for Environment

All Risk Phrases under Section 2:

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

Preparation Date : 23/07/2015 Release Date : 23/07/2015

MSDS No : FORM MSDS R&D 205 00

Renewal Date /No :-

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.