

SECTION 1 – CHEMICAL PRODUCT

Product Identifier Indoxacarb 150 g/l SC
Product Use Insecticide

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Common Name: Indoxacarb CAS No.: 173584-44-6 Chemical family: Oxadiazine insecticides Molecular Formula: C ₂₂ H ₁₇ ClF ₃ N ₃ O ₇ Product use: Non-systemic insecticide	Formulation: Indoxacarb 150 g/l Suspension Concentrate (SC) Hazardous components: Indoxacarb based on S-Enantiomer: 15% Other ingredients: 85%
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SECTION 3 – HAZARDS IDENTIFICATION

Harmful if swallowed. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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SECTION 4 – FIRST AID MEASURES

<p>General advice Never give anything by mouth to an unconscious person.</p> <p>Inhalation Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary.</p> <p>Skin contact Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before re-use.</p> <p>Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. If eye irritation persists, consult a specialist.</p> <p>Ingestion Obtain medical attention. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If victim is conscious: Rinse mouth with water.</p>

SECTION 5 – FIRE FIGHTING MEASURES

<p>Flammable <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>Flash point > 103.3 °C</p>
<p>Specific hazards during fire fighting Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO₂) nitrogen oxides (NO_x)</p>	<p>Suitable Extinguishing Media Water spray, Foam, Dry chemical, Carbon dioxide (CO₂).</p>
<p>Special Protective Equipment for fire Fighters In the event of fire, wear self-contained breathing apparatus.</p>	<p>Extinguishing media which shall not be used for safety reasons High volume water jet, (contamination risk).</p>
<p>Further information Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. (on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.</p>	

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions

Control access to area. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ventilate spill area. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental precautions

Use appropriate container to avoid environmental contamination. Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. If the spill area is porous, the contaminated material must be collected for subsequent treatment or disposal. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up

Clean-up methods - small spillage Prevent further leakage or spillage. Soak up with inert absorbent material. Shovel into suitable container for disposal. Clean-up methods - large spillage Prevent further leakage or spillage. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations. Large spills should be collected mechanically (remove by pumping) for disposal. Collect leaking liquid in sealable (metal/plastic) containers. Collect and contain contaminated absorbent and dike material for disposal.

Additional advice

Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

SECTION 7 – HANDLING AND STORAGE

Handling

Use only according to our recommendations. Wear personal protective equipment. Use only clean equipment. Provide adequate ventilation. Do not breathe vapours or spray mist. When opening containers, avoid breathing vapours that may be emanating. Prepare the working solution as given on the label(s) and/or the user instructions. Use prepared working solution as soon as possible - Do not store. To avoid spills during handling keep bottle on a metal tray. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Never return unused material to storage receptacle. Avoid exceeding of the given occupational exposure limits.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Storage

Requirements for storage areas and containers

Store in original container. Keep in properly labelled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

Advice on common storage

No special restrictions on storage with other products.

Storage temperature

> 3 °C

Other data

Protect from freezing.

Stable under recommended storage conditions.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures

Ensure adequate ventilation, especially in confined areas. Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : Manufacturing and processing work: Half mask with vapour filter A2

Respiratory protection : Field and greenhouse application: Half mask with combination filter A2/P2

Hand protection

Material: Nitrile rubber

Glove thickness: 0.4 – 0.7 mm

Wearing time: 480 min

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

Safety glasses with side-shields.

Skin and body protection

Manufacturing and processing work: Full protective clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing. Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Remove clothing/PPE immediately if material gets inside. For environmental protection remove and wash all contaminated protective equipment before re-use. Dispose of rinse water in accordance with local and national regulations.

Protective measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated. Only protected handlers may be in the area during application.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form

liquid, suspension

Color

light cream

Odor

oily

pH

3.7 at 10 g/l

Flash point

> 103.3 °C

Oxidizing properties

The product is not oxidizing.

Explosive properties

Not explosive

Density

1.039 g/cm³ at 20 °C

Solubility/qualitative

dispersible

Partition coefficient: noctanol/water

log Pow: 4.65

SECTION 10 – STABILITY AND REACTIVITY

Materials to avoid

No materials to be especially mentioned.

Hazardous reactions

No dangerous reaction known under conditions of normal use. Polymerization will not occur. No decomposition if stored and applied as directed.

<p>Acute Oral: LD50 for Rats: 1730mg/kg.</p> <p>Acute Dermal: LD50 for Rats: > 2000 mg/kg</p> <p>Inhalation: LC50 (4h) for Rats > 5.95 mg/l air.</p>	<p>Skin irritation: rabbit Result: No skin irritation Method: OECD Test Guideline 404</p> <p>Eye irritation: rabbit Result: No eye irritation Method: OECD Test Guideline 405</p> <p>Sensitization: Maximization Test guinea pig Result: Causes sensitization. Method: OECD Test Guideline 406</p> <p>Repeated dose toxicity: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.</p> <p>Inhalation rat Incoordination mortality Red blood cell destruction causing abnormal decrease in number of red blood cells (anemia)</p>
<p>Mutagenicity assessment Indoxacarb (S Enantiomer): Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Did not cause genetic damage in animals.</p>	<p>Toxicity to reproduction assessment Indoxacarb (S Enantiomer): Animal testing did not show any effects on fertility.</p>
<p>Carcinogenicity assessment Indoxacarb (S Enantiomer): Did not show carcinogenic effects in animal experiments.</p>	

SECTION 12 – ECOLOGICAL INFORMATION

<p>Elimination information (persistence and degradability) Biodegradability: Not readily biodegradable. Estimation based on data obtained on active ingredient. Bioaccumulation: This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).</p>
<p>Ecotoxicity effects Toxicity to fish: LC50/ 96 h/ Oncorhynchus mykiss (rainbow trout): > 8 mg/l Method: OECD Test Guideline 203</p>
<p>Toxicity to algae EC50/ 72 h/ Pseudokirchneriella subcapitata (green algae): > 4,1 mg/l Method: OECD Test Guideline 201</p> <p>Toxicity to daphnia EC50/ 48 h/ Daphnia magna (Water flea): 3,5 mg/l Method: OECD Test Guideline 202</p>

SECTION 13 – DISPOSAL CONSIDERATIONS

Product

In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging

Do not re-use empty containers.

SECTION 14 – TRANSPORT INFORMATION

UN NUMBER: 3082

Class: 9

Packaging group: III

Classification Code: M6

Marine pollutant: Marine pollutant

SECTION 15 – REGULATORY INFORMATION

Special labelling of certain mixtures

To avoid risks to man and the environment, comply with the instructions for use.

Labelling according to EC Directives

Symbol(s):

Xn: Harmful

N: Dangerous for the environment.

Hazardous components

Indoxacarb (S-Enantiomer)

Indoxacarb, (R-enantiomer)

R-phrases(s)

R22 Harmful if swallowed.

R43 May cause sensitization by skin contact.

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

S-phrases(s)

S 2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S20/21 When using do not eat, drink or smoke.

S24 Avoid contact with skin.

S35 This material and its container must be disposed of in a safe way.

S37 Wear suitable gloves.

S46 If swallowed, seek medical advice immediately and show this container or label.

S57 Use appropriate container to avoid environmental contamination.

SP 1 Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

SECTION 16 – OTHER INFORMATION

Packaging

Packed in 500 ML and 100 ML CoEx containers and labelled according to Iranian regulations and guidelines.

Disclaimer

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.