

MATERIAL SAFETY DATA SHEET
BLANKET 150 SC (INDOXACARB 15% SC)

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Identification of the substance	:	BLANKET 150 SC (Indoxacarb 15% SC)
Use of the substance	:	Insecticide
Manufacturer/supplier	:	Tagros Chemicals India Limited
Address	:	Tagros Chemicals India Ltd. "Jhaver Centre", Rajah Annamalai Building, IV Floor, 72, Marshalls Road, Egmore, Chennai-600 008, India
Emergency telephone number	:	+91-44-42007400
Fax number	:	+91-44-28587873
E-mail	:	info@tagros.com

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS: EMERGENCY OVERVIEW

Eyes	:	May cause redness, pain and blurred vision.
Skin	:	May be harmful absorbed through the skin. May cause sensitisation from prolonged skin contact.
Ingestion	:	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
Inhalation	:	May be harmful if inhaled. Do not breathe spray mist.
Environment	:	Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment. Harmful to terrestrial vertebrates. Very toxic to terrestrial invertebrates.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	EC No.	Classification	Con. % w/w
Indoxacarb, methyl (S)-N-[7-chloro-2,3,4a,5-tetrahydro-4a-(methoxycarbonyl)indeno[1,2-e][1,3,4]oxadiazin-2-ylcarbonyl]-4'-(trifluoromethoxy)carbanilate	173584-44-6	---	T; R25-48/25 Xn; R20 R43 N; R50/53	15
Others	---	---	---	85

4. FIRST AID MEASURES

Contact with eyes	: Wash with copious amount of water. Avoid exposing affected eyes to bright light. Consult doctor immediately and show the container or this material safety data sheet.
Contact with skin	: Remove contaminated clothing and clean the affected skin area immediately.
Ingestion	: Keep patient calm and reassured, rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult doctor immediately.
Inhalation	: If inhaled, remove to fresh air and keep at rest. If patient is not breathing, start artificial respiration immediately. Obtain medical aid if required.

5. FIRE FIGHTING MEASURES

Flash point	: Non-flammable
Extinguishing media	: If product is involved in a fire, use water spray, foam, dry powder, carbon dioxide or sand.
Special exposure hazards	: Indoxacarb decomposes in a fire to emit toxic fumes.
Protective equipment for fire-fighting	: Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
Fire fighting guidance	: Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Avoid contact with spilled material or contaminated surfaces. If ordinary clothing becomes contaminated, remove it immediately. When dealing with the spillage do not eat, drink or smoke and wear personal protective clothing as detailed in section 8.
- Environmental precautions** : Keep people and animals away. Prevent entry into drains, sewers and watercourses.
- Methods for cleaning up** : Shovel or sweep up. Do not flush with water. Place material in a clean, dry container and cover for disposal. Wash contaminated areas with water and detergent. Prevent liquid from entering sewers, waterways or low areas.
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7. HANDLING AND STORAGE

- Handling** : Wear chemically impervious gloves. Wear safety glasses, goggles or face shield. Mechanical ventilation should be used when handling this product in enclosed spaces. Wash thoroughly after handling. Read and observe all precautions and instructions on the label.
- Storage** : Store in original containers, upright and closed. Store in areas that are cool, dry and well ventilated under lock and key. Store away from seeds, fertilizers and animal feed stuff.
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit value	: OSHA: 5 mg/m ³ , 8 hr. TWA, respirable dust.
Engineering controls	: Mechanical ventilation should be used when handling this product in closed spaces. Keep container tightly closed.
Respiratory protection	: Respiratory protection should not be required for normal use and handling. When respirators are required, select NIOSH approved equipment.
Hand protection	: Wear chemical resistant gloves.
Eye protection	: Wear safety goggles with imperforated side shield and face shield.
Skin protection	: Avoid contact with skin. Wear apron, boots and full protective suit.
Environmental exposure controls	: Keep away from food, drink and animal feed stuff. This material and its container must be disposed off as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid
Color	: Off white to ivory
Flash point	: Non flammable
Density	: 1.038 g/ml
Corrosivity	: Non-corrosive
Oxidisation	: Not an oxidiser

10. STABILITY AND REACTIVITY

Stability	: Stable under recommended storage conditions.
Conditions to avoid	: Avoid excessive heat and direct sunlight
Materials to avoid	: Not known
Incompatibility	: Not known

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
LD₅₀ oral, Rats	: >2000 mg/kg bw (Indoxacarb)
LD₅₀ dermal, Rats	: >5000 mg/kg bw (Indoxacarb)
LC₅₀ inhalation, Rats	: >2.7 mg/l (Indoxacarb)
Skin irritation	: Non-irritant to skin of rabbits (Indoxacarb)
Eye irritation	: Non-irritant to eyes of rabbits (Indoxacarb)
Skin sensitization	: Sensitiser to skin of Guinea pigs (Indoxacarb)
Long term studies	
Carcinogenicity	: Non-carcinogenic in rat and mice
Mutagenicity	: Non-mutagenic
Reproductive toxicity	: Non-reprotoxic and teratogenic

12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish	: LC ₅₀ (96 h): bluegill sunfish 0.9, rainbow trout 0.65 mg/l (Indoxacarb).
<i>Daphnia</i>	: LC ₅₀ (48 h) 0.60 mg/l (Indoxacarb).
Algae	: EC ₅₀ (120 hr) > 0.11 mg/l (Indoxacarb).
Bees	: LD ₅₀ (oral) 23.33 µg/bee; (contact) 1.34 µg/bee (Indoxacarb)
Worms	: LC ₅₀ (14 d) >1250 mg/kg (Indoxacarb).
Birds	: Acute oral LD ₅₀ for bobwhite quail 98 mg/kg. Dietary LC ₅₀ (5 d) for mallard ducks >5620, bobwhite quail 808 ppm (Indoxacarb).
Mobility	: Indoxacarb is moderately hydrophobic with a low water solubility of 0.2 mg/L and a log Kow of 4.6. This, coupled with a moderately high soil sorption coefficient Koc of 2200-9400, indicates a relatively low probability of leaching into ground water. Although some of the major degradates of Indoxacarb had very low Koc values, they also had short half-lives that reduce their probability of leaching into ground water.
Persistence and degradability	: DT ₅₀ 17 d in tama silt loam soil. DT ₅₀ for aquatic photolysis 3.8 d (pH 5.0).

13. DISPOSAL CONSIDERATIONS

Product disposal	: Do not empty into drains or waterways. Disposal of at approved landfill or by incineration. Disposal must be in accordance with applicable local regulations.
Container disposal	: Triple rinse the container. Puncture the container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration. If burned, stay out of smoke. Disposal must be in accordance with applicable local regulations.

14. TRANSPORT INFORMATION

UN number	: 2902
UN class	: 6.1
UN packaging group	: III
Proper Shipping Name	: PESTICIDE LIQUID, TOXIC, N.O.S
Additional information	: Indoxacarb designated as marine pollutant.

15. REGULATORY INFORMATION

Classification	: T: Toxic Xn: Harmful N: Dangerous for the environment
Risk Phrases	: R20: Harmful by inhalation. R25: Toxic if swallowed. R43: May cause sensitisation by skin contact. R48/25: Toxic: danger of serious damage to health by prolonged exposure if swallowed. R50/53: Very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.
Safety Phrases	: S1/2: Keep locked up and out of the reach of children. S24: Avoid contact with skin. S37: Wear suitable gloves. S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible) S60: This material and its container must be disposed of as hazardous waste. S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

16. OTHER INFORMATION

MSDS issued	: 27 th July 2013
MSDS Received	: 23 rd May 2016

DISCLAIMER

The above information is intended to give general health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the substance or product for which purposes the substance or product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with. The requirement or recommendation of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.