SAFETY DATA SHEET (SDS)	
TITLE:	**INDOXACARB 150 EC**

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Product Name	:	CIBA INDOXACARB 150 EC
Common Name	:	Indoxacarb 150 G/L EC
CAS No.	:	173584-44-6
Index Number	:	607-700-00-0

1.2 Relevant identified uses of the substance: insecticide**.**

1.3 Details of the Manufacturer / Supplier of the safety data sheet:

Supplier	CIBA AGRIPHARMA SARL 78 Boulevard Haussmann 75008 Paris , France
Tel	Tel: +33 6 51 39 90 00
E-mail	administration@ciba- agripharma.com
Webpage	www. ciba- agripharma.com

1.4 Emergency Phone Number (24 hours)

+33 6 51 39 90 00

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

2.1.1 Classification:

The substance is classified as following according to REGULATION (EC) No 1272/2008 (CLP).

1272/2008/EU	
Pictograms / Signal word code (s)	**Hazard Statement Code (s)**
GHS06, GHS08, GHS09, Dgr	H301, H317, H332, H372, H400, H410

For full text of H-phrases: see section 2.1.3.

2.1.2 The most important adverse effects

The most important adverse human health effects: Health Hazards: harmful if swallowed or inhaled.

The most important adverse environmental effects: very toxic to aquatic organisms, with long lasting effects in the aquatic environment.

2.1.3 According to 1272/2008/EU REGULATION

Pictograms / Signal word code (s)

Dgr GHS06 GHS08 GHS09

Hazard Statement code (s)

H301	:	Toxic if shallowed
H317	:	May cause an allergic skin reaction
H332	:	Harmful if inhaled
H372	:	Causes damage to organs (blood, nervous system, heart) through prolonged or repeated exposure
H400	:	Harmful to aquatic life.
H410	:	Harmful to aquatic life with long lasting effects.

2.2 Other hazards

Specific concentration Limits and M factors (for active substance): M(chronic)=1

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name / CAS No	% w/V	Hazard Pictograms (1272/2008/EC)	Hazard Statements (1272/2008/EC)
Indoxacarb / 173584-44-6	15	GHS06, GHS08, GHS09, Dgr	H301, H317, H332, H372, H400, H410
Inert materials	up to 100%		

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 General information

Treat symptomatically. If you feel unwell seek medical advice (show the label where possible).

4.1.2 In case of inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.

4.1.3 In case of skin contact

Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

4.1.4 In case of eyes contact

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

4.1.5 In case of ingestion

Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.

4.2 Note to physician

Treat symptomatically. Treatment based on judgment of the physician in response to reactions of the patient.

4.2.1 Most important symptoms and effects, both acute and delayed :

This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner. SKIN: Prolonged exposure may cause skin irritation. A single prolonged exposure is not likely to result in the materials being absorbed through the skin in harmful amounts. INGESTION: Single dose oral toxicity is moderate.

5.0 FIRE – FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	:	Water fog or fine spray, carbon dioxide, dry chemical, or foam. Do not use direct water stream. May spread fire.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	:	Combustion or thermal combustion will evolve toxic and irritant vapors

5.3 Advice for fire-fighters

Keep people away. Isolate fire area and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environmental damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Hand held carbon dioxide or dry chemical extinguishers may be used for small fires. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. Do no use direct water stream. May spread fire. Fight fire from protected location or safe distance. Consider use of unmanned hose

holder or monitor nozzles. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Immediately withdraw all personnel from area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. Contain firewater run-off if possible. Fire water run-off, if not contained may cause environmental damage.

5.4 Fire and Explosion Hazards:

Fire may produce irritating or poisonous vapours mists or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 Personal precautions

Do not inhale dust. Ventilate area of spill or leak, especially confined areas. Avoid contact with skin and eyes.

6.2 Environmental precautions

Do not discharge into drains or rivers. Do not allow to enter soil, waterways or waste water canal. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label. When the product contaminates public waters, inform appropriate authorities immediately in accordance with local regulations

6.3 Methods and material for containment and cleaning up

Collect & place in container for disposal according to local/ national regulations.

6.3.1 Other information

N/A

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.5 Additional information

N/A

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

7.1.1 Protective measures

Avoid contact with eyes and skin, and inhalation of dust. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of

correctly to avoid contamination. Protect against physical damage. Use non-sparking type tools and equipment, including explosion proof ventilation. Do not contaminate lakes, streams, and ponds.

7.1.2 Advice on general occupational by hygiene

Avoid contact with eyes, skin or clothing. When using, do not eat, drink, or smoke. Wash hands and exposed skin before meals and afterwork. Wash out container thoroughly and dispose of safely.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions	:	Store in a closed, original container in a dry, cool covered warehouse in original, well-labelled containers. Keep containers tightly closed. Store away from food, feedstuffs, fertilisers, seed and agricultural chemicals. Keep away from children and animals. Keep away from heat & sources of ignition. Keep away from combustible material. Keep in an area equipped with sprinklers. No smoking. Local regulations should be complied with.
Further information on storage conditions	:	N/A

8.0 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational exposure limits

No occupational exposures limits have been established**.**

8.1.2 Additional exposure limits under the conditions of use: N/A

8.2 Exposure controls

8.2.1 Appropriate engineering controls

It is essential to provide adequate ventilation. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations. If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

8.2.2 Personal protection equipment

An approved respirator suitable for protection from dusts and mists of pesticides is required. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

8.2.3 Eye / Face protection

The use of safety goggles is recommended. Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

8.2.4 Skin Protection

Employee must wear appropriate protective (impervious) clothing and equipment to prevent skin contact with the substance. Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

8.2.5 Respiratory protection

Avoid breathing dust. Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full-face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

8.2.6 Other information

Follow all label instructions. Train employees in safe use of the product. Follow manufacturer's instructions for cleaning/maintaining personal protection equipment. Keep and wash personal protection equipment separately from other laundry.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	Liquid
Odor	:	Characteristic
Flash point (^{o}C)	:	N/A
pH value (1 % emulsion in water)	:	N/A
Density	:	0.5 – 0.7 g/ml
Oxidizing properties	:	N/A
Explosive properties	:	N/A
Auto-ignition temperature	:	N/A
Decomposition temperature	:	N/A

9.2 Other information

N/A

10.0 STABILITY AND RELIABILITY

10.1 Reactivity

No information available

10.2 Chemical stability

Stable under normal storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known

10.4 Conditions to avoid

Avoid temperatures above 70°C. Product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

10.5 Incompatible materials

Incompatible with oxidizing materials.

10.6 Hazardous decomposition products

The substance decomposes on burning, and producing toxic and corrosive fumes including toxic fumes.

10.7 Hazard Polymerization

Will not occur.

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

- Inhalation : LC50 (rat) >2.0 mg/l of air over 4 hours
- Dermal : LD50 (rat) > 5000 mg/kg
- Oral : LD50 (rat) > 2000 mg/kg

Skin corrosion/Irritation : Not irritant to skin of rabbits

Eye damage/irritation : Non irritating

Respiratory or skin sanitization : N/A

Repeated exposure : N/A

Other information

Germ cell mutagenicity : N/A

Carcinogenicity : N/A

Reproductive toxicity : N/A

STOT- single exposure : N/A

STOT- repeated exposure : N/A

Aspiration hazard : N/A

12.0 ECOLOGICAL INFORMATION

12.1 Toxicity

12.1.1 Aquatic Toxicity

Indoxacarb, its R-enantiomer and degradates are “moderately to very highly toxic” to freshwater and estuarine/marine fish on an acute basis with LC 50s ranging from 0.024 to > 1.3 mg/L. These same compounds are “moderately toxic” to “very highly toxic” freshwater and estuarine/marine invertebrates on an acute basis

with EC50s ranging from 0.029 to 2.94 mg/L. Chronic toxicities range from 0.0006 to 0.0184 mg/L for estuarine fish and invertebrates and from 0.004 to 0.15 mg/L for freshwater fish and invertebrates.

12.1.2 Avian Toxicity

Bees: Indoxacarb and its R-enantiomer is "practically non-toxic" by dietary intake and "highly toxic" by contact.

Birds: Indoxacarb and its R-enantiomer are "moderately toxic" to avian species on an acute oral basis and subacute dietary basis. The lowest LC50is 808 mg/kg-diet for bobwhite quail.

12.1.3 Environmental Fate

. Indoxacarb is considered to be moderately persistent with aerobic half lives ranging from 3 to 693 days and anaerobic range from 147 to 233 days. It is considered to be immobile with K_{ocs} ranging from 3300 to 9600 ml/g.

12.1.4 Persistence and degradability

N/A.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

See 13.2.

13.2 Product / Packaging disposal

13.2.1 Product waste disposal

Prevent dispersion. Remove waste product to a suitable incinerator. According to national or local legislation. Waste of residues: Keep waste separate. Remove as chemical waste, according to national or local legislation.

13.2.2 Packing waste disposal

Remove as chemical waste, according to national or local legislation.

14.0 TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

UN No	:	3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Indoxacarb)
Class(es)	:	9
Packing group	:	III
Hazard label(s)	:	9, marine pollutant

14.2 Sea transport (IMDG-Code/GGVSee)

UN-No	:	3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Indoxacarb)

Class(es)	:	9
Packing group	:	III
Hazard label(s)	:	9, marine pollutant

14.3 Air transport (ICAO-IATA/DGR)

UN No	:	3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Indoxacarb)
Class(es)	:	9
Packing group	:	III
Hazard label(s)	:	9, marine pollutant

15.0 REGULATORY INFORMATION

15.1 Hazard and Precautionary statements in accordance with the regulation 1272/2008/EC

Pictograms and Signal Word Code(s)	See section 2.1
Hazard Statement Code (s)	See section 2.1

16.0 OTHER INFORMATION

16.1 Pictograms and Signal Word Code(s)mentioned in section 3 in accordance with the regulation 1272/2008/EC

See section 2.1.

16.2 Hazard statements mentioned in section 3 in accordance with the regulation 1272/2008/EC:

See section 2.1.

16.3 Training advice: N/A

16.4 Disclaimer

The above information contained herein is given in good faith and to the best of our knowledge. However, no warranty is expressed or implied.

16.5 Further Information

The information contained herein relates only to the specified material identified. CIBA AGRIPHARMA, believes that such information is accurate and reliable as of the data of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. CIBA AGRIPHARMA urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

This material safety data sheet adopts the provisions of the European Commission Directive 2001/58/EC and Regulations 1272/2008 (CLP) and 453/2010 (REACH).