

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Indoxacarb Formulation

**Manufacturer or supplier's details**

Company : MSD

Address : 126 E. Lincoln Avenue  
Rahway, New Jersey U.S.A. 07065

Telephone : +1-908-740-4000

Emergency telephone number : +1-908-423-6000

E-mail address : EHSDATASTEWARD@msd.com

**Recommended use of the chemical and restrictions on use**

Recommended use : Veterinary product

Restrictions on use : Not applicable

## 2. HAZARDS IDENTIFICATION

**GHS Classification**

Flammable liquids : Category 2

Acute toxicity (Oral) : Category 4

Serious eye damage/eye irritation : Category 2A

Skin sensitisation : Category 1

Specific target organ toxicity - single exposure : Category 3

Specific target organ toxicity - repeated exposure : Category 1 (Blood, Nervous system, Heart)

Long-term (chronic) aquatic hazard : Category 2

**GHS label elements**

Hazard pictograms :



## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

---

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.  
H302 Harmful if swallowed.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H372 Causes damage to organs (Blood, Nervous system, Heart) through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P260 Do not breathe mist or vapours.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P314 Get medical advice/ attention if you feel unwell.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P391 Collect spillage.

**Storage:**

P403 + P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue:             |
| 5.0     | 2024/07/06     | 25522-00026 | 2024/04/06                      |
|         |                |             | Date of first issue: 2014/10/24 |

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards which do not result in classification**

Vapours may form explosive mixture with air.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Components**

| Chemical name    | CAS-No.     | Concentration (% w/w) |
|------------------|-------------|-----------------------|
| Propan-2-ol      | 67-63-0     | >= 30 -< 60           |
| Indoxacarb (ISO) | 173584-44-6 | >= 10 -< 25           |

**4. FIRST AID MEASURES**

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : If inhaled, remove to fresh air.  
Get medical attention if symptoms occur.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water.  
Remove contaminated clothing and shoes.  
Get medical attention.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Get medical attention.
- If swallowed : If swallowed, DO NOT induce vomiting.  
Get medical attention.  
Rinse mouth thoroughly with water.  
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : Harmful if swallowed.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.  
Causes damage to organs through prolonged or repeated exposure.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
- Notes to physician : Treat symptomatically and supportively.

**5. FIREFIGHTING MEASURES**

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue:             |
| 5.0     | 2024/07/06     | 25522-00026 | 2024/04/06                      |
|         |                |             | Date of first issue: 2014/10/24 |

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.  
Flash back possible over considerable distance.  
Vapours may form explosive mixtures with air.  
Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Carbon oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.  
Ventilate the area.  
Use personal protective equipment.  
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
- Environmental precautions : Avoid release to the environment.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Non-sparking tools should be used.  
Soak up with inert absorbent material.  
Suppress (knock down) gases/vapours/mists with a water spray jet.  
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

**Indoxacarb Formulation**

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue:             |
| 5.0     | 2024/07/06     | 25522-00026 | 2024/04/06                      |
|         |                |             | Date of first issue: 2014/10/24 |

mine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

**7. HANDLING AND STORAGE**

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.  
Use explosion-proof electrical, ventilating and lighting equipment.
- Advice on safe handling : Do not get on skin or clothing.  
Do not breathe mist or vapours.  
Do not swallow.  
Do not get in eyes.  
Wash skin thoroughly after handling.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Non-sparking tools should be used.  
Keep container tightly closed.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Take precautionary measures against static discharges.  
Do not eat, drink or smoke when using this product.  
Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labelled containers.  
Store locked up.  
Keep tightly closed.  
Keep in a cool, well-ventilated place.  
Store in accordance with the particular national regulations.  
Keep away from heat and sources of ignition.
- Materials to avoid : Do not store with the following product types:  
Self-reactive substances and mixtures  
Organic peroxides  
Oxidizing agents  
Flammable gases  
Pyrophoric liquids  
Pyrophoric solids  
Self-heating substances and mixtures  
Poisonous gases  
Explosives

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

| Components | CAS-No. | Value type<br>(Form of | Control parameters / Permissible | Basis |
|------------|---------|------------------------|----------------------------------|-------|
|------------|---------|------------------------|----------------------------------|-------|

## Indoxacarb Formulation

Version 5.0      Revision Date: 2024/07/06      SDS Number: 25522-00026      Date of last issue: 2024/04/06  
Date of first issue: 2014/10/24

|                  |                           | exposure)  | concentration                      |          |
|------------------|---------------------------|------------|------------------------------------|----------|
| Propan-2-ol      | 67-63-0                   | NAB        | 400 ppm<br>983 mg/m <sup>3</sup>   | ID OEL   |
|                  |                           | PSD        | 500 ppm<br>1,230 mg/m <sup>3</sup> | ID OEL   |
|                  |                           | TWA        | 200 ppm                            | ACGIH    |
|                  |                           | STEL       | 400 ppm                            | ACGIH    |
| Indoxacarb (ISO) | 173584-44-6               | TWA        | 50 µg/m <sup>3</sup> (OEB 3)       | Internal |
|                  | Further information: DSEN |            |                                    |          |
|                  |                           | Wipe limit | 100 µg/100 cm <sup>2</sup>         | Internal |

## Biological occupational exposure limits

| Components  | CAS-No. | Control parameters | Biological specimen | Sam-pling time                   | Permissible concentra-tion | Basis     |
|-------------|---------|--------------------|---------------------|----------------------------------|----------------------------|-----------|
| Propan-2-ol | 67-63-0 | Acetone            | Urine               | End of shift at end of work-week | 40 mg/l                    | ACGIH BEI |

**Engineering measures** : Minimize workplace exposure concentrations.  
If sufficient ventilation is unavailable, use with local exhaust ventilation.  
Use explosion-proof electrical, ventilating and lighting equipment.

## Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type : Combined particulates and organic vapour type

Hand protection

Material : Chemical-resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Take note that the product is flammable, which may impact the selection of hand protection. Wash hands before breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:  
Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
Wear the following personal protective equipment:  
If assessment demonstrates that there is a risk of explosive

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

Hygiene measures : atmospheres or flash fires, use flame retardant antistatic protective clothing.  
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).  
If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.  
When using do not eat, drink or smoke.  
Contaminated work clothing should not be allowed out of the workplace.  
Wash contaminated clothing before re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

|  |                          |
|--|--------------------------|
| Appearance                                       | : liquid                 |
| Colour   | : White to light yellow  |
| Odour  | : sweet                  |
| Odour Threshold                                  | : No data available      |
| pH   | : No data available      |
| Melting point/freezing point                     | : No data available      |
| Initial boiling point and boiling range          | : No data available      |
| Flash point                                      | : 18 °C                  |
| Evaporation rate                                 | : No data available      |
| Flammability (solid, gas)                        | : Not applicable         |
| Flammability (liquids)                           | : No data available      |
| Upper explosion limit / Upper flammability limit | : No data available      |
| Lower explosion limit / Lower flammability limit | : No data available      |
| Vapour pressure                                  | : No data available      |
| Relative vapour density                          | : No data available      |
| Relative density                                 | : No data available      |
| Density  | : 1.12 g/cm <sup>3</sup> |
| Solubility(ies)                                  |                          |

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue:             |
| 5.0     | 2024/07/06     | 25522-00026 | 2024/04/06                      |
|         |                |             | Date of first issue: 2014/10/24 |

|  |   |  |
|--|---|--|
| Water solubility                       | : | No data available  |
| Partition coefficient: n-octanol/water | : | Not applicable   |
| Auto-ignition temperature              | : | No data available  |
| Decomposition temperature              | : | No data available  |
| Viscosity                              | : |  |
| Viscosity, kinematic                   | : | No data available  |
| Explosive properties                   | : | Not explosive  |
| Oxidizing properties                   | : | The substance or mixture is not classified as oxidizing. |
| Molecular weight                       | : | No data available  |
| Particle characteristics               | : |  |
| Particle size                          | : | Not applicable   |

**10. STABILITY AND REACTIVITY**

|                                    |   |  |
|------------------------------------|---|--|
| Reactivity                         | : | Not classified as a reactivity hazard.   |
| Chemical stability                 | : | Stable under normal conditions.  |
| Possibility of hazardous reactions | : | Highly flammable liquid and vapour.<br>Vapours may form explosive mixture with air.<br>Can react with strong oxidizing agents. |
| Conditions to avoid                | : | Heat, flames and sparks.   |
| Incompatible materials             | : | Oxidizing agents   |
| Hazardous decomposition products   | : | No hazardous decomposition products are known.   |

**11. TOXICOLOGICAL INFORMATION**

|  |   |  |
|--|---|--|
| Information on likely routes of exposure | : | Inhalation<br>Skin contact<br>Ingestion<br>Eye contact |
|--|---|--|

**Acute toxicity**

Harmful if swallowed.

**Product:**

|                           |   |   |
|---------------------------|---|---|
| Acute oral toxicity       | : | Acute toxicity estimate: 916.54 mg/kg<br>Method: Calculation method                   |
| Acute inhalation toxicity | : | Acute toxicity estimate: > 5 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist |



## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

Method: Calculation method

**Components:****Propan-2-ol:**

|                           |  |
|---------------------------|--|
| Acute oral toxicity       | : LD50 (Rat): > 5,000 mg/kg  |
| Acute inhalation toxicity | : LC50 (Rat): > 25 mg/l<br>Exposure time: 6 h<br>Test atmosphere: vapour |
| Acute dermal toxicity     | : LD50 (Rabbit): > 5,000 mg/kg   |

**Indoxacarb (ISO):**

|                           |   |
|---------------------------|---|
| Acute oral toxicity       | : LD50 (Rat, female): 179 mg/kg<br>Symptoms: Loss of reflexes, Breathing difficulties, Tremors<br><br>LD50 (Rat, male): 843 mg/kg |
| Acute inhalation toxicity | : LC50 (Rat, female): 4.2 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist  |
| Acute dermal toxicity     | : LD50 (Rat, male and female): > 5,000 mg/kg  |

**Skin corrosion/irritation**

Not classified based on available information.

**Components:****Propan-2-ol:**

|         |                      |
|---------|----------------------|
| Species | : Rabbit             |
| Result  | : No skin irritation |

**Indoxacarb (ISO):**

|        |                      |
|--------|----------------------|
| Result | : No skin irritation |
|--------|----------------------|

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Components:****Propan-2-ol:**

|         |  |
|---------|--|
| Species | : Rabbit                                       |
| Result  | : Irritation to eyes, reversing within 21 days |

**Indoxacarb (ISO):**

|        |                     |
|--------|---------------------|
| Result | : No eye irritation |
|--------|---------------------|

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

---

**Respiratory or skin sensitisation****Skin sensitisation**

May cause an allergic skin reaction.

**Respiratory sensitisation**

Not classified based on available information.

**Components:****Propan-2-ol:**

|                 |                           |
|-----------------|---------------------------|
| Test Type       | : Buehler Test            |
| Exposure routes | : Skin contact            |
| Species         | : Guinea pig              |
| Method          | : OECD Test Guideline 406 |
| Result          | : negative                |

**Indoxacarb (ISO):**

|           |                     |
|-----------|---------------------|
| Test Type | : Maximisation Test |
| Species   | : Guinea pig        |
| Result    | : positive          |

**Germ cell mutagenicity**

Not classified based on available information.

**Components:****Propan-2-ol:**

|                       |  |
|-----------------------|--|
| Genotoxicity in vitro | : Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative   |
|                       | Test Type: In vitro mammalian cell gene mutation test<br>Result: negative  |
| Genotoxicity in vivo  | : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)<br>Species: Mouse<br>Application Route: Intraperitoneal injection<br>Result: negative |

**Indoxacarb (ISO):**

|                       |   |
|-----------------------|---|
| Genotoxicity in vitro | : Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative  |
|                       | Test Type: Chromosomal aberration<br>Test system: mammalian cells<br>Result: negative                                 |
|                       | Test Type: In vitro mammalian cell gene mutation test<br>Test system: Chinese hamster ovary cells<br>Result: negative |

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

---

|                      |  |
|----------------------|--|
| Genotoxicity in vivo | : Test Type: Micronucleus test<br>Species: Mouse<br>Cell type: Bone marrow<br>Result: negative |
|----------------------|--|

**Carcinogenicity**

Not classified based on available information.

**Components:****Propan-2-ol:**

|                   |                           |
|-------------------|---------------------------|
| Species           | : Rat                     |
| Application Route | : inhalation (vapour)     |
| Exposure time     | : 104 weeks               |
| Method            | : OECD Test Guideline 451 |
| Result            | : negative                |

**Indoxacarb (ISO):**

|                        |                        |
|------------------------|------------------------|
| Species                | : Rat, male and female |
| Application Route      | : oral (feed)          |
| Exposure time          | : 2 Years              |
| Frequency of Treatment | : daily                |
| Result                 | : negative             |

|                        |                          |
|------------------------|--------------------------|
| Species                | : Mouse, male and female |
| Application Route      | : oral (feed)            |
| Exposure time          | : 18 Months              |
| Frequency of Treatment | : daily                  |
| Result                 | : negative               |

**Reproductive toxicity**

Not classified based on available information.

**Components:****Propan-2-ol:**

|                      |   |
|----------------------|---|
| Effects on fertility | : Test Type: Two-generation reproduction toxicity study<br>Species: Rat<br>Application Route: Ingestion<br>Result: negative |
|----------------------|---|

|                               |  |
|-------------------------------|--|
| Effects on foetal development | : Test Type: Embryo-foetal development<br>Species: Rat<br>Application Route: Ingestion<br>Result: negative |
|-------------------------------|--|

**Indoxacarb (ISO):**

|                      |   |
|----------------------|---|
| Effects on fertility | : Test Type: Two-generation study<br>Species: Rat |
|----------------------|---|

## Indoxacarb Formulation

|                |                              |                            |   |
|----------------|------------------------------|----------------------------|---|
| Version<br>5.0 | Revision Date:<br>2024/07/06 | SDS Number:<br>25522-00026 | Date of last issue: 2024/04/06<br>Date of first issue: 2014/10/24 |
|----------------|------------------------------|----------------------------|---|

|                               |  |
|-------------------------------|--|
|                               | Application Route: Oral<br>General Toxicity F1: NOAEL: 1.3 mg/kg body weight<br>Result: negative   |
|                               | Test Type: Two-generation study<br>Species: Rat<br>Application Route: Oral<br>General Toxicity - Parent: NOAEL: 1.3 mg/kg body weight<br>General Toxicity F1: NOAEL: > 6.7 mg/kg body weight<br>Result: Embryotoxic effects and adverse effects on the off-spring were detected. |
| Effects on foetal development | : Test Type: Development<br>Species: Rat<br>Developmental Toxicity: NOAEL: 2 mg/kg body weight<br>Result: No teratogenic effects   |
|                               | Test Type: Development<br>Species: Rabbit<br>Application Route: Oral<br>Developmental Toxicity: NOAEL: 500 mg/kg body weight<br>Result: No adverse effects   |
|                               | Test Type: Development<br>Species: Rat<br>Application Route: Oral<br>Developmental Toxicity: NOAEL: 10 mg/kg body weight   |
|                               | Test Type: Development<br>Species: Rat<br>Application Route: Oral<br>Developmental Toxicity: LOAEL: 100 mg/kg body weight  |

**STOT - single exposure**

May cause drowsiness or dizziness.

**Components:****Propan-2-ol:**

Assessment : May cause drowsiness or dizziness.

**STOT - repeated exposure**

Causes damage to organs (Blood, Nervous system, Heart) through prolonged or repeated exposure.

**Components:****Indoxacarb (ISO):**

|               |   |
|---------------|---|
| Target Organs | : Blood, Nervous system, Heart                                    |
| Assessment    | : Causes damage to organs through prolonged or repeated exposure. |

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

---

**Repeated dose toxicity****Components:****Propan-2-ol:**

|                   |                       |
|-------------------|-----------------------|
| Species           | : Rat                 |
| NOAEL             | : 12.5 mg/l           |
| Application Route | : inhalation (vapour) |
| Exposure time     | : 104 Weeks           |

**Indoxacarb (ISO):**

|                   |                                 |
|-------------------|---------------------------------|
| Species           | : Rat, male and female          |
| NOAEL             | : 1.7 mg/kg                     |
| LOAEL             | : 4.1 mg/kg                     |
| Application Route | : Oral                          |
| Exposure time     | : 90 d                          |
| Target Organs     | : Blood, Central nervous system |

|                   |                        |
|-------------------|------------------------|
| Species           | : Rat, male and female |
| NOAEL             | : 50 mg/kg             |
| LOAEL             | : 500 mg/kg            |
| Application Route | : Dermal               |
| Exposure time     | : 28 d                 |
| Target Organs     | : Blood                |

|                   |                         |
|-------------------|-------------------------|
| Species           | : Rat                   |
| NOAEL             | : 4.6 mg/m <sup>3</sup> |
| LOAEL             | : 23 mg/m <sup>3</sup>  |
| Application Route | : Inhalation            |
| Exposure time     | : 4 Weeks               |
| Target Organs     | : Blood, Lungs          |

|                   |                        |
|-------------------|------------------------|
| Species           | : Rat, male and female |
| NOAEL             | : 1 mg/kg              |
| LOAEL             | : 2 mg/kg              |
| Application Route | : Oral                 |
| Exposure time     | : 1 yr                 |
| Target Organs     | : Blood                |

|                   |           |
|-------------------|-----------|
| Species           | : Dog     |
| NOAEL             | : 1 mg/kg |
| LOAEL             | : 2 mg/kg |
| Application Route | : Oral    |
| Exposure time     | : 1 yr    |
| Target Organs     | : Blood   |

|                   |                         |
|-------------------|-------------------------|
| Species           | : Mouse                 |
| NOAEL             | : 3 mg/kg               |
| LOAEL             | : 14 mg/kg              |
| Application Route | : oral (feed)           |
| Exposure time     | : 18 Months             |
| Target Organs     | : Nervous system, Heart |

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

**Aspiration toxicity**

Not classified based on available information.

**Experience with human exposure****Components:****Indoxacarb (ISO):**

|                     |   |                                    |
|---------------------|---|------------------------------------|
| General Information | : | No human information is available. |
|---------------------|---|------------------------------------|

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Propan-2-ol:**

|   |   |  |
|---|---|--|
| Toxicity to fish                                    | : | LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 10,000 mg/l<br>Exposure time: 24 h        |
| Toxicity to microorganisms                          | : | EC50 (Pseudomonas putida): > 1,050 mg/l<br>Exposure time: 16 h                 |

**Indoxacarb (ISO):**

|   |   |  |
|---|---|--|
| Toxicity to fish                                    | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 0.65 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203<br><br>LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.9 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 0.6 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202  |
| Toxicity to algae/aquatic plants                    | : | EC50 (Pseudokirchneriella subcapitata (green algae)): > 0.6 mg/l<br>Exposure time: 72 h<br><br>NOEC (Pseudokirchneriella subcapitata (green algae)): 0.46 mg/l<br>Exposure time: 72 h  |
| M-Factor (Acute aquatic toxicity)                   | : | 1  |
| Toxicity to daphnia and other                       | : | NOEC (Daphnia magna (Water flea)): 0.09 mg/l   |

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

---

|  |                     |
|--|---------------------|
| aquatic invertebrates (Chronic toxicity) | Exposure time: 21 d |
| M-Factor (Chronic aquatic toxicity)      | : 1                 |

**Persistence and degradability****Components:****Propan-2-ol:**

|                  |  |
|------------------|--|
| Biodegradability | : Result: rapidly degradable                     |
| BOD/COD          | : BOD: 1,19 (BOD5)<br>COD: 2,23<br>BOD/COD: 53 % |

**Bioaccumulative potential****Components:****Propan-2-ol:**

|  |                 |
|--|-----------------|
| Partition coefficient: n-octanol/water | : log Pow: 0.05 |
|--|-----------------|

**Indoxacarb (ISO):**

|  |                 |
|--|-----------------|
| Partition coefficient: n-octanol/water | : log Pow: 4.65 |
|--|-----------------|

**Mobility in soil****Components:****Indoxacarb (ISO):**

|   |                |
|---|----------------|
| Distribution among environmental compartments | : log Koc: 3.9 |
|---|----------------|

**Other adverse effects**

No data available

---

**13. DISPOSAL CONSIDERATIONS****Disposal methods**

|                        |  |
|------------------------|--|
| Waste from residues    | : Do not dispose of waste into sewer.<br>Dispose of in accordance with local regulations.  |
| Contaminated packaging | : Empty containers should be taken to an approved waste handling site for recycling or disposal.<br>Empty containers retain residue and can be dangerous.<br>Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.<br>If not otherwise specified: Dispose of as unused product. |

## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

---

**14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

|                           |   |                      |
|---------------------------|---|----------------------|
| UN number                 | : | UN 1219              |
| Proper shipping name      | : | ISOPROPANOL SOLUTION |
| Class                     | : | 3                    |
| Packing group             | : | II                   |
| Labels                    | : | 3                    |
| Environmentally hazardous | : | no                   |

**IATA-DGR**

|  |   |                      |
|--|---|----------------------|
| UN/ID No.                                | : | UN 1219              |
| Proper shipping name                     | : | Isopropanol solution |
| Class                                    | : | 3                    |
| Packing group                            | : | II                   |
| Labels                                   | : | Flammable Liquids    |
| Packing instruction (cargo aircraft)     | : | 364                  |
| Packing instruction (passenger aircraft) | : | 353                  |

**IMDG-Code**

|                      |   |  |
|----------------------|---|--|
| UN number            | : | UN 1219                                    |
| Proper shipping name | : | ISOPROPANOL SOLUTION<br>(Indoxacarb (ISO)) |
| Class                | : | 3  |
| Packing group        | : | II   |
| Labels               | : | 3  |
| EmS Code             | : | F-E, S-D                                   |
| Marine pollutant     | : | yes  |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

---

**15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture**

Minister of Industry Regulation No. 23/M-IND/PER/4/2013 concerning the Revision of Minister of Industry Regulation No. 87/M-IND/PER/9/2009 concerning Globally Harmonized System of Classification and Labelling of Chemicals.

Regulation of the Minister of Health No. 472 of 1996 on the Safeguarding of Substances Hazardous to Health



## Indoxacarb Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

---

Hazardous substances that must be registered : Not applicable

**Government Regulation No. 74 of 2001 on the Management of Hazardous and Toxic Substances**

Hazardous substances approved for use : Propan-2-ol

Prohibited substances : Not applicable

Restricted substances : Not applicable

**Regulation of the Ministry of Trade No. 7 of 2022 on Distribution and Control of Hazardous Materials**

Type of hazardous materials subject to distribution and control, Annex I : Not applicable

Type of hazardous materials subject to distribution and control, Annex II : Not applicable

**The components of this product are reported in the following inventories:**

AICS : not determined

DSL : not determined

IECSC : not determined

---

**16. OTHER INFORMATION**

Revision Date : 2024/07/06

**Further information**

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : yyyy/mm/dd

**Full text of other abbreviations**

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)  
ID OEL : Indonesia. Occupational Exposure Limits

ACGIH / TWA : 8-hour, time-weighted average  
ACGIH / STEL : Short-term exposure limit  
ID OEL / NAB : Long term exposure limit  
ID OEL / PSD : Short term exposure limit

**Indoxacarb Formulation**

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 2024/04/06  |
| 5.0     | 2024/07/06     | 25522-00026 | Date of first issue: 2014/10/24 |

---

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

ID / EN