

Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Indoxacarb / Permethrin Formulation

Manufacturer or supplier's details

Company name of supplier : MSD

Address : 126 E. Lincoln Avenue

Rahway, New Jersey U.S.A. 07065

Telephone : 908-740-4000 Emergency telephone : 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

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin sensitization : Category 1

Specific target organ toxicity

- single exposure

Category 3

Specific target organ toxicity

- repeated exposure

Category 1 (Blood, Nervous system, Heart)

GHS label elements

Hazard pictograms







Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.

H302 + H332 Harmful if swallowed or if inhaled. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

H372 Causes damage to organs (Blood, Nervous system,

Heart) through prolonged or repeated exposure.

Precautionary Statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking.



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

P260 Do not breathe mist or vapors.

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.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P314 Get medical advice/ attention if you feel unwell.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

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

Other hazards

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours). Vapors may form explosive mixture with air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)	
Permethrin (ISO)	52645-53-1	>= 30 -< 50	
1-Methoxy-2-propanol	107-98-2	>= 30 -< 50	
Indoxacarb (ISO)	173584-44-6	>= 10 -< 20	

SECTION 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.

If not breathing, give artificial respiration. If breathing is difficult, give oxygen.



Indoxacarb / Permethrin Formulation

Version Date of last issue: 30.09.2023 Revision Date: SDS Number: 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

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. Flush eyes with water as a precaution.

In case of eye contact Get medical attention if irritation develops and persists.

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

If swallowed

Harmful if swallowed or if inhaled. May cause an allergic skin reaction. May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated

exposure.

This product contains a pyrethroid.

Pyrethroid poisoning should not be confused with carbamate

or organophosphate poisoning.

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).

Treat symptomatically and supportively. Notes to physician

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray

> Alcohol-resistant foam Carbon dioxide (CO2)

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. Vapors may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod: :

ucts

Carbon oxides

Chlorine compounds

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances 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 fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer-

Remove all sources of ignition. Use personal protective equipment.



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

gency procedures 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/vapors/mists with a water spray

jet.

For large spills, provide diking or other appropriate

containment to keep material from spreading. If diked 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

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

SECTION 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 equip-

ment.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe mist or vapors.

Do not swallow.

Avoid contact with 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.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye

Materials to avoid



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

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.

Conditions for safe storage : Keep in properly labeled 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. Do not store with the following product types:

Strong oxidizing agents

Self-reactive substances and mixtures

Organic peroxides Flammable solids Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures which in contact with water emit

flammable gases

Explosives Gases

Very acutely toxic substances and mixtures

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type	Control parame-	Basis
		(Form of	ters / Permissible	
		exposure)	concentration	
Permethrin (ISO)	52645-53-1	TWA	80 μg/m3 (OEB 3)	Internal
		Wipe limit	800 μg/100 cm ²	Internal
1-Methoxy-2-propanol	107-98-2	VLE-PPT	100 ppm	NOM-010-
				STPS-2014
		VLE-CT	150 ppm	NOM-010-
				STPS-2014
		TWA	50 ppm	ACGIH
		STEL	100 ppm	ACGIH
Indoxacarb (ISO)	173584-44-6	TWA	50 μg/m3 (OEB 3)	Internal
	Further information: DSEN			
		Wipe limit	100 μg/100 cm2	Internal

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



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

exposure assessment demonstrates exposures outside the

recommended guidelines, use respiratory protection.

Filter type Hand protection

Combined particulates and organic vapor type

Material : Chemical-resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration 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 glasses

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 atmospheres or flash fires, use flame retardant antistatic

protective clothing.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : Clear white to yellow.

Odor : ether-like

Odor 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 : 33.5 °C

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

Upper explosion limit / Upper : No data available



Indoxacarb / Permethrin Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

flammability limit

Lower explosion limit / Lower

flammability limit

: No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : 1.096

Density : No data available

Solubility(ies)

Water solubility : No data available

Partition coefficient: n-

octanol/water

Not applicable

Autoignition 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

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard. Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Flammable liquid and vapor.

Vapors may form explosive mixture with air. Can react with strong oxidizing agents.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents Hazardous decomposition : No hazardous de

products

No hazardous decomposition products are known.



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity : Acute toxicity estimate: 572.63 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 11 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Components:

Permethrin (ISO):

Acute oral toxicity : LD50 (Rat): 480 - 554 mg/kg

Acute inhalation toxicity : LC50 (Rat): 2.3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

1-Methoxy-2-propanol:

Acute oral toxicity : LD50 (Rat): 4,016 mg/kg

Acute inhalation toxicity : LC50 (Mouse): < 22.2 mg/l

Exposure time: 6 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Indoxacarb (ISO):

Acute oral toxicity : LD50 (Rat, female): 179 mg/kg

Symptoms: Loss of reflexes, Breathing difficulties, Tremors

LD50 (Rat, male): 843 mg/kg

Acute inhalation toxicity : LC50 (Rat, female): 4.2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

Permethrin (ISO):

Species : Rabbit

Result : No skin irritation

1-Methoxy-2-propanol:

Species : Rabbit

Result : No skin irritation

Indoxacarb (ISO):

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Permethrin (ISO):

Species : Rabbit

Result : No eye irritation

1-Methoxy-2-propanol:

Species : Rabbit

Result : No eye irritation

Indoxacarb (ISO):

Result : No eye irritation

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Components:

Permethrin (ISO):

Test Type : Buehler Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : positive

Assessment : Probability or evidence of skin sensitization in humans



Indoxacarb / Permethrin Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

1-Methoxy-2-propanol:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : negative

Indoxacarb (ISO):

Test Type : Maximization Test
Species : Guinea pig
Result : positive

Germ cell mutagenicity

Not classified based on available information.

Components:

Permethrin (ISO):

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro)

Result: negative

Test Type: Chromosome aberration test in vitro

Result: positive

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse Result: negative

Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Mouse Result: negative

Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse Result: negative

Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Rat

Application Route: Intraperitoneal injection

Result: negative



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Mouse

Application Route: Ingestion

Result: positive

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

1-Methoxy-2-propanol:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: In vitro sister chromatid exchange assay in mam-

malian cells Result: equivocal

Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro) Method: OECD Test Guideline 482

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Indoxacarb (ISO):

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosomal aberration Test system: mammalian cells

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Cell type: Bone marrow

Result: negative



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

Carcinogenicity

Not classified based on available information.

Components:

Permethrin (ISO):

Species : Rat Result : negative

Species : Mouse Result : negative

1-Methoxy-2-propanol:

Species : Rat

Application Route : inhalation (vapor)

Exposure time : 2 Years

Method : OECD Test Guideline 453

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:

Permethrin (ISO):

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion

Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion

Result: negative

1-Methoxy-2-propanol:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat



Indoxacarb / Permethrin Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

Application Route: inhalation (vapor) Method: OECD Test Guideline 416

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Indoxacarb (ISO):

Effects on fertility : Test Type: Two-generation study

Species: Rat

Application Route: Oral

General Toxicity F1: NOAEL: 1.3 mg/kg body weight

Result: negative

Test Type: Two-generation study

Species: Rat

Application Route: Oral

General Toxicity Parent: NOAEL: 1.3 mg/kg body weight General Toxicity F1: NOAEL: > 6.7 mg/kg body weight Result: Embryotoxic effects and adverse effects on the

offspring were detected.

Effects on fetal development : Test Type: Development

Species: Rat

Developmental Toxicity: NOAEL: 2 mg/kg body weight

Result: No teratogenic effects.

Test Type: Development

Species: Rabbit

Application Route: Oral

Developmental Toxicity: NOAEL: 500 mg/kg body weight

Result: No adverse effects.

Test Type: Development

Species: Rat

Application Route: Oral

Developmental Toxicity: NOAEL: 10 mg/kg body weight

Test Type: Development

Species: Rat

Application Route: Oral

Developmental Toxicity: LOAEL: 100 mg/kg body weight

STOT-single exposure

May cause drowsiness or dizziness.

Components:

1-Methoxy-2-propanol:

Assessment : May cause drowsiness or dizziness.



Indoxacarb / Permethrin Formulation

Version Date of last issue: 30.09.2023 Revision Date: SDS Number: 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

STOT-repeated exposure

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

Components:

Indoxacarb (ISO):

: Blood, Nervous system, Heart Target Organs

Assessment : Causes damage to organs through prolonged or repeated

exposure.

Repeated dose toxicity

Components:

Permethrin (ISO):

Species Rat

NOAEL 0.2201 mg/l Application Route : Inhalation Exposure time : 90 Days

Species Rat NOAEL 175 mg/kg

Application Route Ingestion Exposure time 90 Days

1-Methoxy-2-propanol:

Species Rat NOAEL 919 mg/kg

Application Route Ingestion Exposure time 35 Days

Species Rat NOAEL 1.1 mg/l

NOAEL
Application Route
Exposure time
Method inhalation (vapor)

OECD Test Guideline 453 Method

Species
NOAEL
Application Route Rabbit : 1,838 mg/kg Skin contact Exposure time 90 Days

Indoxacarb (ISO):

Species Rat, male and female

NOAEL 1.7 mg/kg : 4.1 mg/kg LOAEL Application Route Oral Exposure time 90 d

Target Organs Blood, Central nervous system

Species Rat, male and female

NOAEL 50 mg/kg



Indoxacarb / Permethrin Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 7.0
 09.07.2024
 27894-00024
 Date of first issue: 04.11.2014

LOAEL : 500 mg/kg
Application Route : Dermal
Exposure time : 28 d
Target Organs : Blood

Species : Rat

NOAEL : 4.6 mg/m3
LOAEL : 23 mg/m3
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 y
Target Organs : Blood

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

Species: MouseNOAEL: 3 mg/kgLOAEL: 14 mg/kgApplication Route: oral (feed)Exposure time: 18 Months

Target Organs : Nervous system, Heart

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

Components:

Indoxacarb (ISO):

General Information : No human information is available.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Permethrin (ISO):

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.00079 mg/l

Exposure time: 96 h

Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.0001 mg/l

Exposure time: 48 h



Indoxacarb / Permethrin Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

Toxicity to algae/aquatic : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 1.13

plants m

Exposure time: 72 h

EC10 (Pseudokirchneriella subcapitata (green algae)): 0.0023

mg/l

Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Danio rerio (zebra fish)): 0.00041 mg/l

Exposure time: 35 d

Method: OECD Test Guideline 210

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.0047 µg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50: > 1,000 mg/l

Exposure time: 3 h

1-Methoxy-2-propanol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 6,812 mg/l

Exposure time: 96 h Method: DIN 38412

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 23,300 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

: ErC50 (Skeletonema costatum (marine diatom)): 6,745 mg/l

Exposure time: 72 h Method: ISO 10253

Toxicity to microorganisms : IC50: > 1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Indoxacarb (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.65 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.9 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.6 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 0.6

mg/l

Exposure time: 72 h



Indoxacarb / Permethrin Formulation

Version Date of last issue: 30.09.2023 Revision Date: SDS Number: 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.46

mg/l

Exposure time: 72 h

Toxicity to daphnia and other: aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.09 mg/l

Exposure time: 21 d

Persistence and degradability

Components:

Permethrin (ISO):

Biodegradability Result: Not readily biodegradable.

Method: OECD Test Guideline 301F

1-Methoxy-2-propanol:

Biodegradability Result: Readily biodegradable.

> Biodegradation: 96 % Exposure time: 28 d

Method: OECD Test Guideline 301E

Bioaccumulative potential

Components:

Permethrin (ISO):

Bioaccumulation Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): 570

Partition coefficient: n-

octanol/water

log Pow: 4.67

1-Methoxy-2-propanol:

Partition coefficient: n-

octanol/water

: log Pow: < 1

Indoxacarb (ISO):

Partition coefficient: n-

log Pow: 4.65

octanol/water

Mobility in soil **Components:**

Indoxacarb (ISO):

Distribution among environ-

mental compartments

log Koc: 3.9

Other adverse effects

No data available



Indoxacarb / Permethrin Formulation

Version Date of last issue: 30.09.2023 Revision Date: SDS Number: 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues Do not dispose of waste into sewer.

Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Empty containers retain residue and can be dangerous. 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.

If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number UN 3092

Proper shipping name 1-METHOXY-2-PROPANOL SOLUTION

Class 3 Packing group Ш Labels 3 no

Environmentally hazardous

IATA-DGR

UN/ID No. UN 3092

Proper shipping name 1-Methoxy-2-propanol solution

Class 3 Packing group Ш

Labels Flammable Liquids

Packing instruction (cargo

aircraft)

Packing instruction (passen: 355

ger aircraft)

IMDG-Code

UN number UN 3092

Proper shipping name 1-METHOXY-2-PROPANOL SOLUTION

366

(Permethrin (ISO), Indoxacarb (ISO))

Class Packing group Ш Labels 3 F-E. S-D **EmS Code** Marine pollutant yes

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

Not applicable for product as supplied.

Domestic regulation

NOM-002-SCT

UN number UN 3092

Proper shipping name 1-METHOXY-2-PROPANOL, SOLUTION

Class 3



Indoxacarb / Permethrin Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

Packing group : III Labels : 3

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.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Federal Law for the control of chemical precursors, : Not applicable essential chemical products and machinery for producing capsules, tablets and pills.

The ingredients of this product are reported in the following inventories:

AICS : not determined

DSL : not determined

IECSC : not determined

SECTION 16. OTHER INFORMATION

Revision Date : 09.07.2024 Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

NOM-010-STPS-2014 : Mexico. Norm NOM-010-STPS-2014 on Chemicals Polluting

the Work Environment - Identification, Assessment and Con-

trol - Appendix 1 Occupational Exposure Limits

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

NOM-010-STPS-2014 / VLE- : Time weighted average limit value

PP1

NOM-010-STPS-2014 / VLE- : Short term exposure limit value

CT

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 Chemi-



Indoxacarb / Permethrin Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 7.0 09.07.2024 27894-00024 Date of first issue: 04.11.2014

cal 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

Sources of key data used to compile the Material 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.

The information is considered as correct, but not exhaustive, and will be used only as a guide, which is based in the current knowledge of the substance or mixture, and is applicable to proper safety precautions for the product.

MX / Z8