

Indoxacarb Formulation

Version Revision Date: SDS Number: Date of last issue: 2023/03/20 11.0 2023/09/26 25528-00025 Date of first issue: 2014/10/24

1. PRODUCT AND COMPANY IDENTIFICATION

Chemical product name : Indoxacarb Formulation

Supplier's company name, address and phone number

Company name of supplier : MSD

Address : Kumagaya, Saitama Prefecture , Xicheng 810 MSD Co., Ltd.

Menuma factory

Telephone : 048-588-8411

E-mail address : EHSDATASTEWARD@msd.com

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

Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product Restrictions on use : Not applicable

2. HAZARDS IDENTIFICATION

GHS classification of chemical product

Flammable liquids : Category 2

Acute toxicity (Oral) : Category 4

Serious eye damage/eye irri-

tation

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)

Short-term (acute) aquatic

hazard

Category 2

Long-term (chronic) aquatic

hazard

Category 2

GHS label elements



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Hazard pictograms :









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, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

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 immediate-

ly all contaminated clothing. Rinse skin with water.

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.





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Storage:

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

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards which do not result in classification

lines of the emergency as-

sumed

Important symptoms and out- : Vapours may form explosive mixture with air.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)	ENCS No.
Propan-2-ol	67-63-0	>= 30 - < 40	2-207
Ethyl Acetoacetate	141-97-9	>= 20 - < 30	2-1475
Indoxacarb (ISO)	173584-44-6	>= 10 - < 20	

4. FIRST AID MEASURES

General advice In the case of accident or if you feel unwell, seek medical ad-

vice 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, DO NOT induce vomiting. If swallowed

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 Harmful if swallowed.

May cause an allergic skin reaction.



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delayed 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

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. Vapours may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod: :

ucts

Carbon oxides

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 firefighters

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

Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- :

tive equipment and emer-

gency procedures

Remove all sources of ignition.

Ventilate the area.

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective 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.





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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-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

7. HANDLING AND STORAGE

Handling

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 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 as-

sessment

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.

Avoidance of contact : Oxidizing agents

Hygiene measures : 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.

Storage

Conditions for safe storage : Keep in properly labelled containers.

Store locked up.



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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:

> Oxidizing solids Oxidizing liquids

: Unsuitable material: None known. Packaging material

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Threshold limit value and permissible exposure limits for each component in the work environment

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Reference concentration / Permissible concentration	Basis
Propan-2-ol	67-63-0	ACL	200 ppm	JP OEL ISHL
		OEL-C	400 ppm 980 mg/m3	JP OEL JSOH
		TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
Indoxacarb (ISO)	173584-44-6	TWA	50 μg/m3 (OEB 3)	Internal
	Further information: DSEN			
		Wipe limit	100 μg/100 cm2	Internal

Biological occupational exposure limits

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

Engineering measures Minimize workplace exposure concentrations.

If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Use explosion-proof electrical, ventilating and lighting equip-

Personal protective equipment

Respiratory protection If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection.

Filter type

Hand protection

Combined particulates and organic vapour type



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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.

Wear the following personal protective equipment: Eye protection

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 atmospheres or flash fires, use flame retardant antistatic

protective clothing.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state liquid

Colour White to light yellow

Odour sweet

Odour Threshold No data available

Melting point/freezing point No data available

Boiling point, initial boiling

point and boiling range

No data available

Flammability (solid, gas) Not applicable

Flammability (liquids) No data available

Lower explosion limit and upper explosion limit / flammability limit

Upper explosion limit / Up- : No data available

per flammability limit

Lower explosion limit / Lower flammability limit No data available

Flash point 18 °C

Decomposition temperature No data available



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pН No data available

Evaporation rate No data available

Auto-ignition temperature No data available

Viscosity

No data available Viscosity, kinematic

Solubility(ies)

Water solubility No data available

Partition coefficient: n-

octanol/water

Not applicable

Vapour pressure No data available

Density and / or relative density

No data available Relative density

Density 1.12 g/cm³

Relative vapour density 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

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

Possibility of hazardous reac-

tions

Highly flammable liquid and vapour.

Vapours 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

products

No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation



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exposure Skin contact

Ingestion Eye contact

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : Acute toxicity estimate: 916.54 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Components:

Propan-2-ol:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 25 mg/l

Exposure time: 6 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Ethyl Acetoacetate:

Acute oral toxicity : LD50 (Rat): 10,800 mg/kg

Acute inhalation toxicity : LC50 (Rabbit): > 40 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Remarks: Based on data from similar materials

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

Method: OECD Test Guideline 402

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



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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

Ethyl Acetoacetate:

Species : Rabbit

Method : OECD Test Guideline 404

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

Ethyl Acetoacetate:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Indoxacarb (ISO):

Result : No eye irritation

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



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Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

Ethyl Acetoacetate:

Test Type : Freund's complete adjuvant 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)

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

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

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Ethyl Acetoacetate:

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

Method: OECD Test Guideline 471

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Indoxacarb (ISO):

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



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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

Carcinogenicity

Not classified based on available information.

Components:

Propan-2-ol:

Species

. Kat : inhalation (vapour) : 104 weeks Application Route

Exposure time

Method : OECD Test Guideline 451

Result : negative

Indoxacarb (ISO):

: Rat, male and female **Species**

: oral (feed) Application Route Exposure time : 2 Years Frequency of Treatment : daily Result : negative

: Mouse, male and female Species

Application Route : oral (feed) : 18 Months Exposure time : daily Frequency of Treatment : negative Result

Reproductive toxicity

Not classified based on available information.

Components:

Propan-2-ol:

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

Species: Rat

Application Route: Ingestion

Result: negative



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Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion

Result: negative

Ethyl Acetoacetate:

Effects on fertility: Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 421

Result: negative

Effects on foetal develop-

ment

Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 421

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 off-

spring were detected.

Effects on foetal develop-

ment

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



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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:

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.

Repeated dose toxicity

Components:

Propan-2-ol:

Species : Rat : 12.5 mg/l NOAEL

Application Route : inhalation (vapour)

Exposure time : 104 Weeks

Ethyl Acetoacetate:

Species : Rat

NOAEL

: >= 1,000 mg/kg: Ingestion: 28 Days Application Route Exposure time

Method : OECD Test Guideline 407

Indoxacarb (ISO):

Species Rat, male and female

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

Target Organs Blood, Central nervous system

Species Rat, male and female



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NOAEL : 50 mg/kg
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 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

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

Components:

Indoxacarb (ISO):

General Information : No human information is available.

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Ecotoxicity

Components:

Propan-2-ol:



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Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 24 h

: EC50 (Pseudomonas putida): > 1,050 mg/l Toxicity to microorganisms

Exposure time: 16 h

Ethyl Acetoacetate:

Toxicity to fish LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

EC10 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms EC50: > 3,000 mg/l

Exposure time: 24 h

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

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.46

mg/l

Exposure time: 72 h

M-Factor (Acute aquatic tox- :



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icity)

Toxicity to daphnia and other : NOEC (Daphnia magna (Water flea)): 0.09 mg/l

aquatic invertebrates (Chron- Exposure time: 21 d

ic toxicity)

M-Factor (Chronic aquatic : 1

toxicity)

Persistence and degradability

Components:

Propan-2-ol:

Biodegradability : Result: rapidly degradable

BOD/COD : BOD: 1.19 (BOD5)COD: 2.23BOD/COD: 53 %

Ethyl Acetoacetate:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 66 % Exposure time: 28 d

Method: OECD Test Guideline 301D

Bioaccumulative potential

Components:

Propan-2-ol:

Partition coefficient: n- : log Pow: 0.05

octanol/water

Ethyl Acetoacetate:

Partition coefficient: n- : log Pow: 0.8

octanol/water

Indoxacarb (ISO):

Partition coefficient: n- : log Pow: 4.65

octanol/water

Mobility in soil

Components:

Indoxacarb (ISO):

Distribution among environ- : log Koc: 3.9

mental compartments

Hazardous to the ozone layer

Not applicable

Other adverse effects

No data available



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13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling 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.

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)

Packing instruction (passen: 353

ger aircraft)

IMDG-Code

UN number : UN 1219

Proper shipping name : ISOPROPANOL SOLUTION

364

(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.

National Regulations

Refer to section 15 for specific national regulation.



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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.

ERG Code : 129

15. REGULATORY INFORMATION

Related Regulations

Fire Service Law

Group 4, Type 1 petroleums, Water insoluble liquid, (200 litre), Hazardous rank II

Chemical Substance Control Law

Priority Assessment Chemical Substance

Chemical name	Number
Isopropyl alcohol	102

Industrial Safety and Health Law

Harmful Substances Prohibited from Manufacture

Not applicable

Harmful Substances Required Permission for Manufacture

Not applicable

Substances Prevented From Impairment of Health

Not applicable

Circular concerning Information on Chemicals having Mutagenicity - Annex 2: Information on Existing Chemicals having Mutagenicity

Not applicable

Circular concerning Information on Chemicals having Mutagenicity - Annex 1: Information on Notified Substances having Mutagenicity

Not applicable

Substances Subject to be Notified Names

Article 57-2 (Enforcement Order Table 9)

Chemical name	Concentration (%)	Remarks
Propyl alcohol	>=30 - <40	-
ethyl acetoacetate	>=20 - <30	From April 1st, 2026
Indeno[1,2-e][1,3,4]oxadiazine-4a(3H)-	>=10 - <20	From April 1st, 2025
carboxylic acid, 7-chloro-2,5-dihydro-2-		
[[(methoxycarbonyl)[4-		
(trifluoromethoxy)phenyl]amino]carbonyl]-		
, methyl ester, (4aS)-		

Substances Subject to be Indicated Names

Article 57 (Enforcement Order Article 18)

Chemical name	Remarks
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Propyl alcohol	-
ethyl acetoacetate	From April 1st, 2026
Indeno[1,2-e][1,3,4]oxadiazine-4a(3H)-carboxylic acid, 7-chloro-2,5-	From April 1st, 2025
dihydro-2-[[(methoxycarbonyl)[4-	
(trifluoromethoxy)phenyl]amino]carbonyl]-, methyl ester, (4aS)-	

Ordinance on Prevention of Hazards Due to Specified Chemical Substances

Not applicable

Ordinance on Prevention of Lead Poisoning

Not applicable

Ordinance on Prevention of Tetraalkyl Lead Poisoning

Not applicable

Ordinance on Prevention of Organic Solvent Poisoning

Organic Solvents Class 2

Enforcement Order of the Industrial Safety and Health Law - Attached table 1 (Dangerous Substances)

Inflammable Substance

Poisonous and Deleterious Substances Control Law

Not applicable

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof

Not applicable

High Pressure Gas Safety Act

Not applicable

Explosive Control Law

Not applicable

Vessel Safety Law

Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)

Aviation Law

Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

Marine Pollution and Sea Disaster Prevention etc Law

Bulk transportation : Noxious liquid substance(Category Z)

Pack transportation : Classified as marine pollutant

Narcotics and Psychotropics Control Act

Narcotic or Psychotropic Raw Material (Export / Import Permission)

Not applicable

Specific Narcotic or Psychotropic Raw Material (Export / Import permission)



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Not applicable

Waste Disposal and Public Cleansing Law

Specially Controlled Industrial Waste

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

AICS not determined

DSL not determined

IECSC not determined

16. OTHER INFORMATION

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 Agen-

cy, 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) JP OEL ISHL Japan. Administrative Control Levels

JP OEL JSOH

Japan. The Japan Society for Occupational Health. Recom-

mendation of Occupational Exposure Limits

ACGIH / TWA 8-hour, time-weighted average ACGIH / STEL Short-term exposure limit JP OEL ISHL / ACL Administrative Control level

JP OEL JSOH / OEL-C Occupational Exposure Limit-Ceiling

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



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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.

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