

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



78744 Biodocarb, fungicide

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Revised edition: 10.07.2019

Version: 3

Printed: 15.06.2021

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Biodocarb, fungicide

Article No.: 78744

UFI:

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:
Metalworking fluids

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.com

EMail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

Acute toxicity (oral), hazard category 4
Skin irritation, hazard category 2
Skin sensitization, hazard category 1
Serious eye damage, hazard category 1
Acute toxicity (inhalation), hazard category 4
Specific target organ toxicity (repeated exposure), hazard category 1
Acute aquatic toxicity, hazard category 1
Chronic aquatic toxicity, hazard category 2

H302 Harmful if swallowed.

Cat.: 4
H315 Causes skin irritation.

Cat.: 2
H317 May cause an allergic skin reaction.

Cat.: 1
H318 Causes serious eye damage.

Cat.: 1
H332 Harmful if inhaled.

Cat.: 4
H372 Causes damage to organs through prolonged or repeated

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exposure.

Cat.: 1

H400

Very toxic to aquatic life.

Cat.: 1

H411

Toxic to aquatic life with long lasting effects.

Cat.: 2

Possible Environmental Effects:

See Section 12.

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

Hazard designation:



GHS05-2



GHS07



GHS08



GHS09

Signal word:

Danger

Hazard designation:

H302

Harmful if swallowed.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H318

Causes serious eye damage.

H332

Harmful if inhaled.

H372

Causes damage to organs through prolonged or repeated exposure.

H400

Very toxic to aquatic life.

H411

Toxic to aquatic life with long lasting effects.

Safety designation:

P280

Wear protective gloves/ clothing/ eye/ face protection.

P304+P341

If inhaled: If breathing is difficult, remove victim to fresh air and keep at rest.

P305+P351+P338

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing.

P310

Immediately call a poison center or physician.

Hazardous components for labelling:

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3-Iodo-2-propinyl butylcarbamate

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization:

Mixture of the following substances.

Information on Components / Hazardous Ingredients:

Oxydipropanol; REACH Reg. No. 01-2119456811-38	70 - 80 %	CAS-Nr: 25265-71-8 EINECS-Nr: 246-770-3 EC-Nr:
3-Iodo-2-propinyl butylcarbamate (H302-317-318-331-372-400-410); REACH: Biozide	20 %	CAS-Nr: 55406-53-6 EINECS-Nr: 259-267-5 EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

*Remove contaminated clothes immediately.
Intoxication symptoms may occur after several hours, therefore a 48 hour medical observation is necessary.*

After inhalation:

*Get medical attention immediately. Call a poison center or physician.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If it is suspected that are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
Give artificial respiration in case breathing is not regular or if it has stopped.
Mouth-to-mouth resuscitation may be harmful to the person giving first aid.
In case of unconsciousness place patient stable in side position for transportation.
Keep the airways open. Unfasten tight garments (collar, tie, belt).*

After skin contact:

*Get medical attention immediately. Call a poison center or physician.
Wash off with plenty of water and soap.
Remove contaminated clothing. Wash off immediately with plenty of water and soap.
Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure.
Wash clothing before reuse. Clean shoes thoroughly before reuse.*

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After eye contact:

Get medical attention immediately. Call a poison center or physician.

After ingestion:

Rinse mouth thoroughly with plenty of water and drink plenty of water. Consult a physician.

Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Rinse mouth with plenty of water and give small sips of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

Eye contact: causes serious eye damage.

Harmful by inhalation.

Skin contact: causes irritations. May cause an allergic skin reaction.

Harmful if swallowed.

Effects:

Eye contact: pain, watering, redness

Skin contact: pain or irritation, redness, blistering may occur

Swallowing: stomach pains

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

In case of inhalation of decomposition products in a fire, symptoms may be delayed. Following severe exposure the patient should be kept under medical surveillance for at least 48h.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

In case of fire: formation of carbon monoxide, carbon dioxide, nitrogen oxides, halogenated compounds.

5.3. Advice for Firefighters

Protective equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Clothing for fire-fighters (including helmets, protective boots and

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gloves) conforming to European standard EN 469 will provide a basis level of protection for chemical incidents.

Further information:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Wear appropriate protective equipment. Keep spectators away.
Do not touch or walk through spilt material.
Do not inhale vapors or mist.
Ensure adequate ventilation.*

6.2. Environmental Precautions

Environmental precautions:

*Prevent contamination of soil, drains and surface waters.
Contact local authorities if product pollutes soil or vegetation.*

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Contain with absorbent material (e.g. sand, acid binder, universal binder, sawdust) and collect in appropriate containers for disposal.

6.4. Reference to other Sections

*For information for safe handling see Section 7.
Protective clothing, see Section 8.
Dispose of contaminated material according to Section 13.*

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

*Avoid the formation of aerosol.
Provide good ventilation and/or exhaust at the workplace. Ensure adequate ventilation. Handle and open container with care.*

Hygienic measures:

*Keep away from foodstuffs and drinks.
Change contaminated clothing. Wash hands after work.
Wash thoroughly after handling.*

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

*Store in tightly sealed containers in a dry and cool room.
Do not store together with food stuff and animal feed.
Store containers in a well ventilated location.
Protect product from direct sunlight.*

Requirements for storage areas and containers:

Suitable container material: stainless steel.

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*Store the product in the original container.
Store in correctly labelled containers.*

Information on fire and explosion protection:

*No special measures necessary.
Do not store together with: oxidants.*

Storage class:

10; Combustible liquids (TRGS 510)

Further Information:

Stir well before use.

7.3. Specific End Use(s)

Further information:

No information available.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900

3-Iodo-2-propinyl butylcarbamate (55406-53-6): TWA: 0.058 mg/m³, 0.005 ppm (8h, long-term value); 0.116 mg/m³, 0.01 ppm (15 min, short-term value)

Oxydipropanol: TWA: 100 mg/m³ (8h, long-term value); 200 mg/m³ (15 min, short-term value)

Parameters to be controlled:

3-Iodo-2-propinyl butylcarbamate (55406-53-6): SUVA (CH) MAK: 0.12 mg/m³, 0,01 ppm (8h, long-term value); 0.24 mg/m³, 0.02 ppm (15 min, short-term value)

Oxydipropanol (CAS 25265-71-8), (CH): STEL: 280 mg/m³ (inhalable vapor and aerosol); TWA: 140 mg/m³ (inhalable vapor and aerosol)

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Facilities storing or utilizing this material should be equipped with an eyewash and shower facility.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

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Contaminated work clothing should not be worn out of the workplace. Wash contaminated clothing before reusing.

Respiratory protection:

Required in case of insufficient ventilation (EN 143 or 149).

Hand protection:

Chemical protective gloves (EN 374 (Europe), F739 (US)).

Protective gloves. The glove material has to be impermeable and resistant to the product / substance / preparation.

Protective glove material:

Recommended: Protective index 6, > 480 min. of permeation time accord. EN 374.

Butyl or nitrile rubber.

Eye protection:

Tightly fitting safety goggles (EN 166).

Body protection:

Protective clothing.

Safety shoes.

Environmental precautions:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: liquid

Color: yellowish

Odor: light

Odor threshold:
no information available

pH-Value: 6 (1 %; 20°C)

Melting temperature: -39°C

Boiling temperature: 232°C

Flash point: 126°C

Evaporation rate:
No information available.

Flammability (solid, gas):
not applicable

Upper explosion limit:
not determined

Lower explosion limit:

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not determined

Vapor pressure:

not determined

Vapor density:

> 1

Density:

1.08-1.12 g/cm³ (20°C)

Solubility in water:

partly soluble

Coefficient of variation (n-Octanol/Water):

not determined

Auto-ignition temperature:

not determined

Decomposition temperature:

not determined

Viscosity, dynamic:

145 mPa.s (20°C)

Explosive properties:

Product does not present an explosion hazard.

Oxidizing properties:

no information available

Bulk density:

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

1.32 cm²/s (20°C)

0.32 cm²/s (40°C)

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

No further information.

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Unknown.

10.4. Conditions to Avoid

Conditions to avoid:

No further information available.

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Thermal decomposition:

No decomposition if used according to specifications.

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

2000 mg/kg (rat)

3-Iodo-2-propynyl butylcarbamate: 1056 mg/kg (rat, f); 1795 mg/kg (rat, m); NOAEL: 35 mg/kg (90d, rat), 20 mg/kg (2 years, rat)

LD50, dermal:

> 2000 mg/kg (rat)

3-Iodo-2-propynyl butylcarbamate: > 2000 mg/kg (rabbit); NOAEL: 200 mg/kg (90d, rat)

LC50, inhalation:

ATE: 3.35 mg/l

3-Iodo-2-propynyl butylcarbamate: 0.67 mg/l (4h; rat); NOAEL: 1.16 mg/l (90d, rat)

Primary effects

Irritant effect on skin:

Causes skin irritation.

Irritant effect on eyes:

Causes serious eye irritation.

Risk of severe eye damage.

3-Iodo-2-propynyl butylcarbamate: strong irritant effect

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

May cause sensitization.

Mutagenicity:

3-Iodo-2-propynyl butylcarbamate: negative (in vitro, bacteria)

Reproductive toxicity:

3-Iodo-2-propynyl butylcarbamate:

Maternal toxicity: Positive: Oral 20 mg/kg and 50 mg/kg (13 days, 7 days/week, rabbit, f)

Development toxicity: Negative: Oral 20 mg/kg and 50 mg/kg (13 days, 7 days/week, rabbit, f)

Carcinogenicity:

No relevant data found.

Teratogenicity:

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3-Iodo-2-propinyl butylcarbamate: 50 mg/kg (oral, rabbit, f): negative

Specific target organ toxicity (STOT):

Single exposure: no information available.

Repeated exposure:

3-Iodo-2-propinyl butylcarbamate: Category 1, inhalation (Target organ: larynx)

Additional toxicological information:

Skin contact: causes skin irritation. May cause an allergic skin reaction.

Eye contact: causes serious eye damage.

Inhalation: harmful.

Swallowing: harmful.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

3-Iodo-2-propinyl butylcarbamate: LC50: 0.067 mg/l (96h, rainbow trout); NOEC: 0.049 mg/l (96h, rainbow trout); NOEC: 0.0084 mg/l (35d, Pimephales promelas)

Daphnia toxicity:

3-Iodo-2-propinyl butylcarbamate: EC50: 0.16 mg/l (48h, Daphnia magna); EC50: 0.05 mg/l (21d, Daphnia magna)

Bacteria toxicity:

3-Iodo-2-propinyl butylcarbamate: EC50: 44 mg/l (3h, microorganism)

Algae toxicity:

3-Iodo-2-propinyl butylcarbamate: EC50: 0.022 mg/l (72h, Scenedesmus subspicatus); NOEC: 0.0046 mg/l (72h, Scenedesmus subspicatus)

No information available.

12.2. Persistency and Degradability

3-Iodo-2-propinyl butylcarbamate: 25 % (1.03 gO₂/g ThSB; 30 mg/l; active sludge; OECD 301F)

12.3. Bioaccumulation

3-Iodo-2-propinyl butylcarbamate: log POW: 2.81

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

Not applicable.

12.6. Other Adverse Effects

Water hazard class:

2 (German Regulation) (Assessment by list): hazardous.

Do not let product contaminate ground water, waterways or sewage system.

Danger to drinking water even if small quantities leak into the ground.

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Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

If product cannot be reused or recycled, it has to be disposed of according to current local regulations.

Do not empty into drains. Avoid release into the environment.

European Waste Code (EWC):

160305 - Organic waste containing hazardous substances.

Uncleaned packaging:

Untaminated packaging may be recycled. Completely empty packaging can be disposed of with the regular waste.

Contaminated packaging must be disposed like the substance.

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA 3082

14.2. UN Proper Shipping Name

ADR/RID: UMWELTGEFÄHRDENDER STOFF, FLÜSSIG, N.A.G. (3-Iod-2-propynyl butylcarbamate)

IMDG/IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-Iodo-2-propynyl butylcarbamate)

14.3. Transport Hazard Classes

ADR Class: 9

Hazard no.: 9

Classification code: M6

Tunnel restriction code: E

IMDG Class (sea): 9

Hazard no.: 9

EmS No.: F-A, S-F

IATA Class: 9

Hazard no.: 9

14.4. Packaging Group

ADR/RID: III

IMDG: III

IATA: III

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14.5. Environmental Hazards

Labelling according 5.2.1.8 ADR/RID: fish and tree

Labelling according 5.2.1.6.3 IMDG: fish and tree

Labelled with "P" according 2.10 IMDG: yes

14.6. Special Precautions for User

Warning: various dangerous materials and products.

14.7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

not applicable

14.8. Further Information

15. Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

2, hazardous for water (German Regulation)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable

Technical instructions on air quality:

15.2. Chemical Safety Assessment

This product contains substances for which a Chemical Safety Assessment is still required.

15.3. Further Information

Listed in the following inventories:

EINECS (EU), TSCA (US), AICS (AUS), DSL (CA), PICCS (PH), KECL (KR), ENCS (JP), NZIoC (NZ), IECSC (CN), TCSI (TW)

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.