

Material Safety Data Sheet

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



78744 Biodocarb, fungicide

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Revised edition: 03.04.2013

Version: 1

Printed: 23.09.2014

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

1.1. Product Identifier

Product Name: Biodocarb, fungicide

Article No.: 78744

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

Identified uses:

Preservative

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet

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.de

EMail: info@kremer-pigmente.de

1.4. Emergency No.

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

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to EC
Regulation 1272/2008

Acute toxicity (oral), hazard category 4
Skin sensitization, hazard category 1
Serious eye damage, hazard category 1

H302 Harmful if swallowed.

Cat.: 4

H317 May cause an allergic skin reaction.

Cat.: 1

H318 Causes serious eye damage.

Cat.: 1

Classification according to EC
Regulation No. 67/548 or No. 1999/45

Irritating (Xi) R37 Irritating to respiratory system.

Irritating (Xi) R41 Risk of serious damage to eyes.

Hazardous to the environment (N) R50 Very toxic to aquatic organisms.

Safety Phrases:

S24: Avoid contact with skin.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, suitable gloves and eye/face protection.

S45: If swallowed, seek medical advice immediately and show this container or label.

S57: Use appropriate container to avoid environmental

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contamination.

S60: This material and its container must be disposed of as hazardous waste.

S61: Avoid release to the environment. Refer to special instructions / Safety data sheets.

Possible Environmental Effects:

See Section 12.

2.2. Label Elements

Classification according to EC Regulation 1272/2008

Hazard designation:



GHS05-1



GHS07

Signal word:

Warning

Hazard designation:

H302

Harmful if swallowed.

H317

May cause an allergic skin reaction.

H318

Causes serious eye damage.

Safety designation:

P280

Wear protective gloves/ clothing/ eye/ face protection.

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:

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.

Hazardous Ingredients:

3-Iodo-2-propinyl butylcarbamate (Xn, Xi, N; R20-22-41-50; H302-318-332-317-335-400)

20 %

CAS-Nr: 55406-53-6

EINECS-Nr: 259-267-5

EC-Nr:

Additional information:

4. First Aid Measures

Description of the First Aid Measures

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4.1.

General information:

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

After inhalation:

Supply fresh air. Consult physician if symptoms persist.

After skin contact:

*Remove contaminated clothing. Wash off immediately with plenty of water and soap.
In case of skin irritation consult physician.*

After eye contact:

Rinse open eyes with plenty of water. In case of discomfort seek medical help.

After ingestion:

*Rinse mouth thoroughly with plenty of water and drink plenty of water. Consult a physician.
Do not induce vomiting.*

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

Symptoms:

No further information available.

Effects:

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

Treatment:

No further information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Foam, carbon dioxide (CO₂), extinguishing powder, water jet.

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

In case of fire: formation of carbon oxides, nitrogen oxides, sulfur dioxide and hydrogen iodide.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

*Contaminated extinguishing water and debris should be disposed of according to local regulations.
Collect contaminated extinguishing water and debris separately;*

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avoid contamination of sewage system.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Wear protective clothing.
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.

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.
Do not store above 30°C.*

Requirements for storage areas and containers:

*Suitable container material: stainless steel.
Storage: In the original container.*

Information on fire and explosion protection:

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

Storage class (VCI):

10; Combustible liquids.

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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):

3-Iodo-2-propinyl butylcarbamate (55406-53-6): MAK: 0.12 mg/m³; 0.01 mg/m³

Parameters to be controlled (EC):

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Ensure adequate ventilation, especially in confined areas.

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.

Respiratory protection:

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

Hand protection:

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

Protective glove material:

Butyl or nitrile rubber.

Eye protection:

Tightly fitting safety goggles (EN 166).

Body protection:

Protective clothing.

Safety shoes.

Environmental precautions:

Prevent contamination of open water ways and sewage system. Avoid contamination of ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: liquid

Color: yellowish

Odor: light

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<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	<i>7 (20°C)</i>
<i>Melting temperature:</i>	<i>not determined</i>
<i>Boiling temperature:</i>	<i>> 200°C</i>
<i>Flash point:</i>	<i>> 100°C</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>not applicable</i>
<i>Upper explosion limit:</i>	<i>not determined</i>
<i>Lower explosion limit:</i>	<i>not determined</i>
<i>Vapor pressure:</i>	<i>not determined</i>
<i>Vapor density:</i>	
<i>Density:</i>	<i>1.105 g/cm³ (20°C)</i>
<i>Solubility in water:</i>	<i>not very miscible</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not determined</i>
<i>Auto-ignition temperature:</i>	<i>Product is not auto-ignitable.</i>
<i>Decomposition temperature:</i>	<i>not determined</i>
<i>Viscosity, dynamic:</i>	<i>150 mPa.s (20°C)</i>
<i>Explosive properties:</i>	<i>Product is not explosive.</i>
<i>Oxidizing properties:</i>	<i>no information available</i>
<i>Bulk density:</i>	

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

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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.

Thermal decomposition:

No decomposition if used according to specifications.

10.5. Incompatible Materials

Strong acids and strong oxidizing agents.

Strong reducing agents.

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

3-Iodo-2-propynyl butylcarbamate: 300 - 500 mg/kg (rat)

LD50, dermal:

3-Iodo-2-propynyl butylcarbamate: > 2000 mg/kg (rat)

LC50, inhalation:

3-Iodo-2-propynyl butylcarbamate: 6.89 mg/l (4h; rat)

Primary effects

Irritant effect on skin:

Slight irritant effect.

Irritant effect on eyes:

*Strong irritant effect.
Risk of severe eye damage.*

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

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May cause sensitization.

Mutagenicity:

No data available.

Reproductive toxicity:

No data available.

Cancerogenity:

No data available.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No data available.

Additional toxicological information:

Eye contact: causes serious eye damage.

12. Ecological Information

12.1. Aquatic Toxicity

3-Iodo-2-propinyl butylcarbamate

Fish toxicity:

LC50: 0.067 mg/l (96h, rainbow trout)

Daphnia toxicity:

EC50: 0.16 mg/l (48h, Daphnia magna)

Bacteria toxicity:

ErC50: 0.022 mg/l (72h, Scenedesmus subcapitatus)

Algae toxicity:

No information available.

12.2. Persistency and Degradability

No information available.

12.3. Bioaccumulation

No information available.

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.*

Behaviour in sewage systems:

Further ecological effects:

Very toxic for water organisms.

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AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

In accordance with regulations for special waste, must be taken to an authorized special waste incineration plant.

European Waste Code (EWC):

Uncleaned packaging:

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

Packaging may be disposed of in the same manner as the product.

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 no.: E

IMDG Class (sea): 9

Hazard no.: 9

EmS No.:

IATA Class: 9

Hazard no.: 9

14.4. Packaging Group

ADR/RID: III

IMDG: III

IATA: III

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

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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

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has not yet been carried out for this product.

15.3. Further Information

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.