

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

### Identification of the Product

Product Name: Biodocarb, fungicide  
Article No.: 78744  
Use of the Substance/Preparation: Artists' and Restoration Material

### Company

Company: Kremer Pigmente GmbH & Co. KG  
Address: Hauptstrasse 41-47, D 88317 Aichstetten  
Tel/Fax: Tel +49 7565 91120, Fax +49 7565 1606  
Internet: www.kremer-pigmente.de, kremer-pigmente@t-online.de  
Emergency No.: +49 7565 91120, Mon-Fri 8:00 - 17:00

## 2. Hazard Identification

Hazard designation:



Xi Irritating



N Hazardous to the environment

Risk Phrases: R41 Risk of serious damage to eyes.  
R50 Very toxic to aquatic organisms.

## 3. Composition/Information on Ingredients

Chemical Characterization: This product is a preparation.  
Hazardous Ingredients: 3-Iodo-2-propinyl butylcarbamate (Xn, Xi, N; R20,22,41,50) 20 %  
CAS-Nr: 55406-53-6 EINECS-Nr: 259-267-5 EC-Nr:

## 4. First Aid Measures

After inhalation: Remove person to fresh air. In case of complaints consult a physician.  
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 physician.  
Information for physician: Symptomatic treatment.

## 5. Fire-Fighting Measures

Suitable extinguishing media: Foam, carbon dioxide (CO<sub>2</sub>), extinguishing powder, water jet.  
Unsuitable extinguishing media: Direct water jet.  
Protective equipment: Use self-containing breathing apparatus.  
Special hazards: In case of fire: formation of toxic pyrolysis products.

Further information: Contaminated extinguishing water and debris should be disposed of according to local regulations.

## 6. Accidental Release Measures

Personal precautions: Wear protective clothing.  
Ensure adequate ventilation.

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

Methods of cleaning/absorption: Contain with inert absorbent material (e.g. sand, acid binder, universal binder, sawdust) and collect in appropriate containers for disposal.

## 7. Handling and Storage

### *Handling*

Instructions on safe handling: Avoid the formation of aerosol.

Information on fire and explosion protection: No special measures necessary.

### *Storage*

Storage conditions: Store in tightly sealed containers in a dry and cool room.  
Do not store above 30°C.

Requirements for storage areas and containers: Suitable container material: Polyethylene or stainless steel.

Storage compatibility: Do not store together with: food, drink and animal feeding stuffs.  
Do not store together with: oxidants.

Storage class (VCI): 10; Combustible liquids.

## 8. Exposure Controls/Personal Protection

Additional information about design of technical systems: Ensure adequate ventilation, especially in confined areas.

### *Personal protective equipment*

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 the shift.

Respiratory protection: Required in case of insufficient ventilation.

Hand protection: Chemical protective gloves (EN 374).

Protective glove material: Butyl or nitrile rubber.

Eye protection: Tightly fitting safety goggles.

Body protection: Protective clothing.  
Safety shoes.

## 9. Physical and Chemical Properties

Form: liquid

Color: yellowish

Odor: light

Melting temperature: < 0°C

Boiling temperature: > 200°C

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Flash point: > 100°C  
Density: 1.05 g/cm<sup>3</sup>  
Solubility in water: partly soluble  
pH-Value: 7 (20°C)  
Viscosity dynamic: 150 mPa.s (20°C)

## 10. Stability and Reactivity

Substances to be avoided: Keep away from strong acids and alkaline materials, and from oxidizing agents.

## 11. Toxicological Information

### *Acute toxicity*

LD50, oral: 3-Iodo-2-propynyl butylcarbamate: 1470 mg/kg (rat)  
Biodocarb: > 2000 mg/kg (rat)  
LD50, dermal: 3-Iodo-2-propynyl butylcarbamate: > 2000 mg/kg (rabbit)  
Biodocarb: > 2000 mg/kg  
LD50, inhalation: 3-Iodo-2-propynyl butylcarbamate: 6.89 mg/l (4h; rabbit)  
Sensitization: No sensitizing effect (guinea pig).

## 12. Ecological Information

Mobility and Bioaccumulation: Bioconcentration factor: 4.5 Cyprinus carpio (carp).  
No bioaccumulation expected.

### *Ecological effects*

Aquatic toxicity: :  
- Fish toxicity: LC50: 0.067 mg/l (96h, rainbow trout)  
LC50: 0.23 mg/l (96h, Lepomis macrochirus)  
- Daphnia toxicity: EC50: 0.65 mg/l (48h, Daphnia magna)  
- Bacteria toxicity: EC50: 0.026 mg/l (72h, Pseudokirchneriella subcapitata)  
AOX Value: Product contains organically bound halogen.  
The halogen value can account for the AOK-value of waste water.

### *Further information*

Water hazard class: 3

## 13. Disposal Considerations

Product: Must be taken to a special incineration plant according to the special waste regulations.

Uncleaned packaging: Recycling is possible when packaging is clean. Completely empty packaging can be disposed of with the regular waste.

## 14. Transport Information

### *Road Transportation ADR/RID*

Class: 9  
Packaging group: III  
UN No.: 3082  
Classification code: M6

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Tunnel No.: E  
Hazard No.: 9  
Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.(3-Iodo-2-propynyl butylcarbamate)

*Sea transportation*

IMDG/GGVSee Class: 9  
Packaging group: III  
UN No.: 3082  
EmS No.: F-A, S-F  
Hazard No.: 9  
Marine pollutant: P  
Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.(3-Iodo-2-propynyl butylcarbamate)

*Air transportation*

ICAO/IATA Class: 9  
Packaging group: III  
UN No.: 3082  
Hazard No.: 9  
Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.(3-Iodo-2-propynyl butylcarbamate)

## 15. Regulatory Information

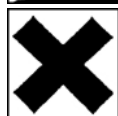
Designation according to EC guidelines:

The material is subject to classification according to EC lists.

Hazard designation:



N Hazardous to the environment



Xi Irritating

Risk Phrases:

R50 Very toxic to aquatic organisms.  
R41 Risk of serious damage to eyes.

Safety Phrases:

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S39 Wear eye/face protection.  
S36 Wear suitable protective clothing.  
S37 Wear suitable gloves.  
S61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

Water hazard class:

3, very hazardous for water

## 16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

Material Safety Data Sheet

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

**78744 - Biodocarb, fungicide**



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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.