

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 24 Jan 2024

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

Carbendazim

### 1.1. Catalog No.:

672821

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Germ cell mutagenicity (Category 1B), H340  
Reproductive toxicity (Category 1B), H360  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

Signal word Danger  
Hazard statement(s)  
H340 May cause genetic defects.

H360 May damage fertility or the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201 Obtain special instructions before use.

P273 Avoid release to the environment.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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

Supplemental Hazard

Statements

none

Restricted to professional users.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms : Methyl benzimidazol-2-ylcarbamate

BCM

Methyl 2-benzimidazolecarbamate

Formula :  $C_9H_9N_3O_2$

Molecular weight : 191.19 g/mol

CAS-No. : 10605-21-7

EC-No. : 234-232-0

Index-No. : 613-048-00-8

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component

Methyl benzimidazol-2-ylcarbamate

CAS-No. 10605-21-7

EC-No. 234-232-0

Index-No. 613-048-00-8

Classification: Muta. 1B; Repr. 1B; Aquatic

Acute 1; Aquatic Chronic 1;

H340, H360FD, H400, H410

Concentration:

$\leq 100\%$

#### 3.1.1. Formula

$C_9H_9N_3O_2$

#### 3.1.2. Molecular Weight (g/mol)

191.19

### 3.1.3. CAS-No.

10605-21-7

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid exposure - obtain special instructions before use. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Combustible solids, toxic

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing

point

Melting point/range: > 300 °C - lit.

f) Initial boiling point and

boiling range

No data available

g) Flash point No data available

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower

flammability or

explosive limits

No data available

k) Vapour pressure No data available

l) Vapour density No data available

m) Relative density No data available

n) Water solubility slightly soluble

o) Partition coefficient: noctanol/

water

log Pow: 1.5

p) Auto-ignition

temperature

No data available

q) Decomposition

temperature

No data available

r) Viscosity No data available

s) Explosive properties No data available

t) Oxidizing properties No data available

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity  
No data available
- 10.2 Chemical stability  
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions  
No data available
- 10.4 Conditions to avoid  
No data available
- 10.5 Incompatible materials  
Strong oxidizing agents
- 10.6 Hazardous decomposition products  
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)  
Other decomposition products - No data available  
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects  
Acute toxicity  
LD50 Oral - Rat - 6,400 mg/kg(Methyl benzimidazol-2-ylcarbamate)  
LD50 Dermal - Rabbit - 8,500 mg/kg(Methyl benzimidazol-2-ylcarbamate)  
Skin corrosion/irritation  
No data available(Methyl benzimidazol-2-ylcarbamate)  
Serious eye damage/eye irritation  
No data available(Methyl benzimidazol-2-ylcarbamate)  
Respiratory or skin sensitisation  
No data available(Methyl benzimidazol-2-ylcarbamate)  
Germ cell mutagenicity  
May alter genetic material.(Methyl benzimidazol-2-ylcarbamate)  
In vivo tests showed mutagenic effects(Methyl benzimidazol-2-ylcarbamate)  
Carcinogenicity  
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
Reproductive toxicity  
May cause congenital malformation in the fetus.(Methyl benzimidazol-2-ylcarbamate)  
Presumed human reproductive toxicant(Methyl benzimidazol-2-ylcarbamate)  
May cause reproductive disorders.(Methyl benzimidazol-2-ylcarbamate)  
Specific target organ toxicity - single exposure  
No data available(Methyl benzimidazol-2-ylcarbamate)  
Specific target organ toxicity - repeated exposure  
No data available  
Aspiration hazard  
No data available(Methyl benzimidazol-2-ylcarbamate)  
Additional Information  
RTECS: DD6500000  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Methyl benzimidazol-2-ylcarbamate)

## 12. ECOLOGICAL INFORMATION

- 12.1 Toxicity  
Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0.3 mg/l - 96.0 h(Methyl benzimidazol-2-ylcarbamate)  
Toxicity to daphnia and other aquatic invertebrates  
EC50 - Daphnia magna (Water flea) - 0.01 - 0.04 mg/l - 48 h(Methyl benzimidazol-2-ylcarbamate)
- 12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Bioaccumulation Ictalurus punctatus - 48 h

- 45 ug/l(Methyl benzimidazol-2-ylcarbamate)

Bioconcentration factor (BCF): 17

12.4 Mobility in soil

No data available(Methyl benzimidazol-2-ylcarbamate)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Very toxic to aquatic life.

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 3077 IMDG: 3077 IATA: 3077

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methyl benzimidazol-2-ylcarbamate)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Methyl benzimidazol-2-ylcarbamate)

IATA: Environmentally hazardous substance, solid, n.o.s. (Methyl benzimidazol-2-ylcarbamate)

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: no IATA: yes

14.6 Special precautions for user

No data available

### 15. REGULATORY INFORMATION

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!