

CARBENDAZIM

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: CARBENDAZIM
Product Code: 4228
CAS#:10605-21-7
Synonym: Methyl benzimidazol-2-ylcarbamate
Chemical Name: Not available
Chemical Formula: C₉H₉N₃O₂
Formula weight: 191.19

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:

Name: Carbendazim

Toxicological Data on Ingredients: Muta. 1B; Repr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H340, H360FD, H400, H410

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Potential Acute Health Effects: Short-term (acute) aquatic hazard (Category 1), H400

Potential Chronic Health Effects: Long-term (chronic) aquatic hazard (Category 1), H410

Carcinogenic Effects: Not available

Mutagenic Effects: Germ cell mutagenicity (Category 1B), H340.

Teratogenic Effects: Not available.

Developmental Toxicity: Not Available

Specific target organ toxicity - Not Available

Reproductive Toxicity: Reproductive toxicity (Category 1B), H360FD

SECTION 4: FIRST AID MEASURES

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.

Most important symptoms and effects, both acute and delay: No data available

Indication of any immediate medical attention and special treatment needed: No data available

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NO_x)

Combustible.



Risk of dust explosion.

Development of hazardous combustion gases or vapours possible in the event of fire.

Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Environmental precautions Do not let product enter drains.

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.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling : Work under hood. Do not inhale substance/mixture.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons

Storage Class:

Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

Specific end use(s) A part from the uses:

No other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form	: Solid
Colour	: Colourless
Odour	: Not available
Odour Threshold	: Not available
pH	: Not available
Melting point/freezing point	: > 300°C
Initial boiling point and boiling range	: Not available
Flash point	: Not available
Evaporation rate	: Not available



Flammability (solid, gas)	: Not available
Upper/lower flammability or explosive limits	: Not available
Vapour pressure	: Not available
Vapour density	: Not available
Relative density	: Not available
Water solubility	: Not available
Partition coefficient	: Not available
Auto-ignition temperature	: Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity: Not available.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) . **Possibility of hazardous reactions:** Not available.

Conditions to avoid : Not available

Incompatible materials: Oxidizing agents

Hazardous decomposition products Other decomposition products - In the event of fire

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity:

LD50 Oral - Rat - 6.400 mg/kg

Inhalation: No data available

LD50 Dermal - Rabbit - 8.500 mg/kg

Serious eye damage/eye irritation:

Not available

Respiratory or skin sensitization: Not available

Carcinogenicity: no data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0,024 mg/l - 96,0 h.

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - 0,15 mg/l - 48 h

and other aquatic

invertebrates

Toxicity to algae NOEC - Pseudokirchneriella subcapitata - 0,5 mg/l - 72 h

Persistence and degradability:

Not Available.

Bioaccumulative potential :

Bioaccumulation Ictalurus punctatus - 48 h

- 45 µg/l(2-(Methoxycarboxamido)benzimidazole)

Mobility in soil no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available

Other adverse affects no data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.



Contaminated packaging Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID: 3077

IMDG: 3077

IATA: 3077

UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE

Transport hazard class(es):

ADR/RID: 9

IMDG: 9

IATA: 9

Packaging group:

ADR/RID: III

IMDG: III

IATA: III

Environmental hazards:

ADR/RID: No

IMDG Marine pollutant: No

IATA: No

SECTION 15: OTHER REGULATORY INFORMATION

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

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

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements.

H340 May cause genetic defects.

H360FD May damage fertility. May damage the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Special Considerations: Not available

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.

