

## Chemical Safety Data Sheet MSDS / SDS

## Fenbendazole-d3

Revision Date:2026-07-18 Revision Number:1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## Product identifier

Product name : Fenbendazole-d3  
CBnumber : CB12509207  
CAS : 1228182-47-5  
Synonyms : Fenbendazole-D3

## Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

## Company Identification

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

## SECTION 2: Hazards identification

## GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Warning

## Precautionary statements

P308+P313 IF exposed or concerned: Get medical advice/attention.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P273 Avoid release to the environment.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P202 Do not handle until all safety precautions have been read and understood.  
P201 Obtain special instructions before use.

## Hazard statements

H410 Very toxic to aquatic life with long lasting effects  
H373 May cause damage to organs through prolonged or repeated exposure

## SECTION 3: Composition/information on ingredients

## Substance

|              |                   |
|--------------|-------------------|
| Product name | : Fenbendazole-d3 |
| Synonyms     | : Fenbendazole-D3 |
| CAS          | : 1228182-47-5    |
| MF           | : C15H10D3N3O2S   |
| MW           | : 302.37          |

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## SECTION 4: First aid measures

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

### After inhalation

Supply fresh air; consult doctor in case of complaints.

### After skin contact

Generally the product does not irritate the skin.

### After eye contact

Rinse opened eye for several minutes under running water.

### After swallowing

If symptoms persist consult doctor.

### Information for doctor

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

No further relevant information available.

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

No further relevant information available.

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## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing agents

Use fire fighting measures that suit the environment.

A solid water stream may be inefficient.

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

No further relevant information available.

#### Advice for firefighters

## **Protective equipment**

No special measures required.

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## **SECTION 6: Accidental release measures**

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

Not required.

### **Environmental precautions**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

### **Methods and material for containment and cleaning up**

Dispose contaminated material as waste according to item 13.

### **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### **Protective Action Criteria for Chemicals**

#### **PAC-1**

Substance is not listed.

#### **PAC-2**

Substance is not listed.

#### **PAC-3**

Substance is not listed.

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## **SECTION 7: Handling and storage**

### **Handling**

#### **Precautions for safe handling**

No special precautions are necessary if used correctly.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

Keep away from sources of ignition.

Take precautionary measures against static discharge.re.

#### **Information about protection against explosions and fires**

No special measures required.

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

#### **Storage**

Store in accordance with information listed on the product insert.

#### **Requirements to be met by storerooms and receptacles**

No special requirements.

#### **Information about storage in one common storage facility**

Not required.

#### **Further information about storage conditions**

None.

#### **Specific end use(s)**

No further relevant information available.

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## **SECTION 8: Exposure controls/personal protection**

#### **Additional information about design of technical systems**

No further data; see item 7.

#### **Control parameters**

#### **Components with limit values that require monitoring at the workplace**

Not required.

#### **Additional information**

The lists that were valid during the creation were used as basis.

#### **Exposure controls**

#### **Personal protective equipment**

#### **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

#### **Breathing equipment**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

## Protection of hands

Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

## Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

## Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

## Eye protection

Tightly sealed goggles

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# SECTION 9: Physical and chemical properties

## Information on basic physicochemical properties

### Appearance

### Physical State

Solid

### Color

Off-white to light yellow

### Odor

Characteristic

### Structural Formula

C<sub>15</sub>H<sub>10</sub>D<sub>3</sub>N<sub>3</sub>O<sub>2</sub>S

### Molecular Weight

302.4 g/mol

### Odor Threshold

Not determined.

### pH

Not applicable.

### Change in condition

**Melting point/Melting range**

Undetermined.

**Boiling point/Boiling range**

Undetermined.

**Flash point**

Not applicable.

**Flammability (solid,gas)**

Product is not flammable.

**Decomposition temperature**

Not determined.

**Auto igniting**

Not determined.

**Danger of explosion**

Product does not present an explosion hazard.

**Explosion limits**

Lower: Not determined.

Upper: Not determined.

**Vapor Pressure**

Not applicable.

**Density**

Not determined.

**Relative Density**

Not determined.

**Vapor Density**

Not applicable.

**Evaporation Rate**

Not applicable.

**Solubility in / Miscibility with**

DMSO: slightly soluble,Methanol: slightly soluble

**Water**

Not determined.

**Partition coefficient (n-octanol/water)**

Not determined.

### **Viscosity**

#### **Dynamic**

Not applicable.

#### **Kinematic**

Not applicable.

### **SOLUBILITY**

DMSO: slightly soluble; Methanol: slightly soluble

### **Other information**

No information available

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## **SECTION 10: Stability and reactivity**

### **Reactivity**

No further relevant information available.

### **Chemical stability**

#### **Thermal decomposition / conditions to be avoided**

No decomposition if used according to specifications.

### **Possibility of hazardous reactions**

No dangerous reactions known.

### **Conditions to avoid**

No further relevant information available.

### **Incompatible materials**

strong reducing agents, strong oxidizing agents

### **Hazardous decomposition products**

sulfur oxides, nitrogen oxides, carbon monoxide, carbon dioxide

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## **SECTION 11: Toxicological information**

### **Information on toxicological effects**

#### **Primary irritant effect**

**on the skin**

No irritant effect.

**on the eye**

No irritating effect.

**Sensitization**

No sensitizing effects known.

**Additional toxicological information****Carcinogenic categories****IARC (International Agency for Research on Cancer)**

Substance is not listed.

**NTP (National Toxicology Program)**

Substance is not listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

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## SECTION 12: Ecological information

**Toxicity****Aquatic toxicity**

No further relevant information available.

**Persistence and degradability**

No further relevant information available.

**Behavior in environmental systems****Bioaccumulative potential**

No further relevant information available.

**Mobility in soil**

No further relevant information available.

**Ecotoxicological effects****Remark**

Very toxic for fish

**Additional ecological information**

## General notes

Water hazard class 3 (Self-assessment) extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

## Results of PBT and vPvB assessment

### PBT

Not applicable.

### vPvB

Not applicable.

### PBT:

Not applicable.

### vPvB:

Not applicable.

## Other adverse effects

No further relevant information available.

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## SECTION 13: Disposal considerations

### Waste treatment methods

#### Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

### Uncleaned packagings

#### Recommendation

Disposal must be made according to official regulations.

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## SECTION 14: Transport information

### UN-Number

DOT, IMDG, IATA UN3077

### UN proper shipping name

DOT, IATA Environmentally hazardous substance, solid, n.o.s.

(Fenbendazole-d3)

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (Fenbendazole-d3)

### **Transport hazard class(es)**

#### **DOT**

Class: 9 Miscellaneous dangerous substances and articles

Label: 9

#### **IMDG, IATA**

Class: 9 Miscellaneous dangerous substances and articles

Label: 9

### **Packing group**

DOT, IMDG, IATA III

### **Environmental hazards**

Marine pollutant: Symbol (fish and tree)

Special marking (IATA): Symbol (fish and tree)

### **Marine pollutant**

Symbol (fish and tree)

### **Special marking (IATA)**

Symbol (fish and tree)

### **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles

### **Hazard identification number (Kemler code)**

90

### **EMS Number**

F-A,S-F

### **Stowage Category**

A

### **Stowage Code**

SW23 When transported in BK3 bulk container, see

### **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

### **Transport/Additional information**

#### **DOT:**

### Quantity limitations

On passenger aircraft/rail: 400 kg

On cargo aircraft only: 400 kg

### IMDG:

### Limited quantities (LQ)

5 kg

### Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

### IATA:

### Remarks

When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of

E1, E2, E4, or E5, this item meets the De Minimis

Quantities exemption, per IATA 2.6.10.

Therefore packaging does not have to be labeled as

Dangerous Goods/Excepted Quantity.

### UN "Model Regulation"

UN 3077 ENVIRONMENTALLY HAZARDOUS

SUBSTANCE, SOLID, N.O.S. (FENBENDAZOLE-D3), 9, III

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## SECTION 15: Regulatory information

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

No further relevant information available.

### Sara

|                                                 |                          |
|-------------------------------------------------|--------------------------|
| Section 355 (extremely hazardous substances):   | Substance is not listed. |
| Section 313 (Specific toxic chemical listings): | Substance is not listed. |
| TSCA (Toxic Substances Control Act):            | Substance is not listed. |
| Hazardous Air Pollutants:                       | Substance is not listed. |

### Proposition 65

|                                                             |                          |
|-------------------------------------------------------------|--------------------------|
| Chemicals known to cause cancer:                            | Substance is not listed. |
| Chemicals known to cause reproductive toxicity for females: | Substance is not listed. |
| Chemicals known to cause reproductive toxicity for males:   | Substance is not listed. |

|                                                  |                          |
|--------------------------------------------------|--------------------------|
| Chemicals known to cause developmental toxicity: | Substance is not listed. |
|--------------------------------------------------|--------------------------|

### **Chemicals known to cause cancer**

Substance is not listed.

### **Chemicals known to cause reproductive toxicity for females**

Substance is not listed.

### **Chemicals known to cause reproductive toxicity for males**

Substance is not listed.

### **Chemicals known to cause developmental toxicity**

Substance is not listed.

### **Carcinogenic categories**

|                                        |                          |
|----------------------------------------|--------------------------|
| EPA (Environmental Protection Agency): | Substance is not listed. |
|----------------------------------------|--------------------------|

### **TLV (Threshold Limit Value)**

Substance is not listed.

### **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

### **Chemical safety assessment**

A Chemical Safety Assessment has not been carried out.

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## **SECTION 16: Other information**

### **Abbreviations and acronyms**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Toxic to Reproduction 2: Reproductive toxicity – Category 2

Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

**Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.