according to GB/T 16483 and GB/T 17519



Fenbendazole (20%) Type A Formulation

| Version | Revision Date: | SDS Number: | Date of last issue: 2023/04/04 |
|---------|----------------|---------------|---------------------------------|
| 3.1 | 2023/09/30 | 7634167-00009 | Date of first issue: 2020/12/02 |

1. PRODUCT AND COMPANY IDENTIFICATION

| Product name | : | Fenbendazole (20%) Type A Formulation |
|--|-----------|--|
| Manufacturer or supplier's de Company | etai : | i ls MSD |
| Address | : | No. 485 Jing Tai Road Pu Tuo District - Shanghai - China 200331 |
| Telephone | : | +1-908-740-4000 |
| Emergency telephone number | : | 86-571-87268110 |
| E-mail address | : | EHSDATASTEWARD@msd.com |
| Recommended use of the che | em | ical and restrictions on use |
| Recommended use Restrictions on use | : | Veterinary product Not applicable |

2. HAZARDS IDENTIFICATION

Emergency Overview

| Appearance Colour Odour | : | powder tan to light brown characteristic | | |
|---|---|--|--|--|
| Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects. | | | | |
| GHS Classification | | | | |
| Reproductive toxicity | : | Category 2 | | |
| Specific target organ toxicity - repeated exposure | : | Category 2 | | |
| Short-term (acute) aquatic hazard | : | Category 1 | | |
| Long-term (chronic) aquatic hazard | : | Category 1 | | |

according to GB/T 16483 and GB/T 17519



Fenbendazole (20%) Type A Formulation

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|---------------|---|--|--|
| - | HS label elements lazard pictograms | : | |
| S | ignal word | : Warnir | ng |
| Н | azard statements | ing the H373 I peated | id Suspected of damaging fertility. Suspected of damag- e unborn child. May cause damage to organs through prolonged or re- d exposure. Very toxic to aquatic life with long lasting effects. |
| Ρ | recautionary statements | P202 I and ur P260 I P273 / P280 \ | ention: Obtain special instructions before use. Do not handle until all safety precautions have been read inderstood. Do not breathe dust. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protec- ace protection. |
| | | attentio | + P313 IF exposed or concerned: Get medical advice/ |
| | | Storag P405 \$ | ge: Store locked up. |
| | | Dispo P501 [| |

Physical and chemical hazards

Not classified based on available information.

Health hazards

Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.

Environmental hazards

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Other hazards which do not result in classification

Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin. May form explosive dust-air mixture during processing, handling or other means.

3. COMPOSITION/INFORMATION ON INGREDIENTS

according to GB/T 16483 and GB/T 17519



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Substance / Mixture

: Mixture

Components

| Chemical name | CAS-No. | Concentration (% w/w) |
|-------------------------------|------------|-----------------------|
| fenbendazole | 43210-67-9 | >= 20 -< 25 |
| White mineral oil (petroleum) | 8042-47-5 | >= 1 -< 10 |

4. FIRST AID MEASURES

| | General advice | : | In the case of accident or if you feel unwell, seek medical ad- vice immediately. |
|------|------------------------------|---|--|
| | | | When symptoms persist or in all cases of doubt seek medical |
| | | | advice. |
| | | | |
| | If inhaled | : | If inhaled, remove to fresh air. |
| | | | Get medical attention. |
| | In case of skin contact | : | In case of contact, immediately flush skin with soap and plenty of water. |
| | | | Remove contaminated clothing and shoes. |
| | | | Get medical attention. |
| | | | Wash clothing before reuse. |
| | | | Thoroughly clean shoes before reuse. |
| | In case of eye contact | : | If in eyes, rinse well with water. |
| | | | Get medical attention if irritation develops and persists. |
| | If swallowed | : | If swallowed, DO NOT induce vomiting. |
| | | | Get medical attention. |
| | | | Rinse mouth thoroughly with water. |
| | Most important symptoms | : | Suspected of damaging fertility. Suspected of damaging the |
| | and effects, both acute and | | unborn child. |
| | delayed | | May cause damage to organs through prolonged or repeated exposure. |
| | | | Contact with dust can cause mechanical irritation or drying of the skin. |
| | | | Dust contact with the eyes can lead to mechanical irritation. |
| | Protection of first-aiders | | First Aid responders should pay attention to self-protection, |
| | | • | and use the recommended personal protective equipment |
| | | | when the potential for exposure exists (see section 8). |
| | Notes to physician | | Treat symptomatically and supportively. |
| | | · | |
| 5. I | FIREFIGHTING MEASURES | | |
| | Suitable extinguishing media | : | Water spray |
| | | - | Alcohol-resistant foam |
| | | | Carbon dioxide (CO2) |
| | | | Dry chemical |
| | Unsuitable extinguishing | : | None known. |
| | media | | |
| | • ··· · · · · · | | |

| Specific hazards during fire- | : | Avoid generating dust; fine dust dispersed in air in sufficient |
|-------------------------------|---|---|
| fighting | | concentrations, and in the presence of an ignition source is a |
| | | potential dust explosion hazard. |
| | | Exposure to computies products may be a bazard to back |

according to GB/T 16483 and GB/T 17519



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|----------------|--|--|---|
| Ha uct | zardous combustion prod- ts | : Carbon ox Nitrogen o Sulphur ox Silicon oxi Metal oxic | xides (NOx) kides des |
| Sp od | ecific extinguishing meth- s | cumstanc Use water | uishing measures that are appropriate to local cir- es and the surrounding environment. spray to cool unopened containers. ndamaged containers from fire area if it is safe to do |
| | ecial protective equipment firefighters | : In the eve | nt of fire, wear self-contained breathing apparatus. nal protective equipment. |
| 6. ACC | IDENTAL RELEASE MEAS | SURES | |
| tive | rsonal precautions, protec- e equipment and emer- ncy procedures | Follow sat | nal protective equipment. e handling advice (see section 7) and personal pro- uipment recommendations (see section 8). |
| En | vironmental precautions | Prevent fu Retain and Local auth | ase to the environment. rther leakage or spillage if safe to do so. d dispose of contaminated wash water. orities should be advised if significant spillages contained. |
| | Methods and materials for : containment and cleaning up | | or vacuum up spillage and collect in suitable con- disposal. ersal of dust in the air (i.e., clearing dust surfaces ressed air). sits should not be allowed to accumulate on surfac- se may form an explosive mixture if they are re- to the atmosphere in sufficient concentration. ational regulations may apply to releases and dis- is material, as well as those materials and items in the cleanup of releases. You will need to deter- h regulations are applicable. 3 and 15 of this SDS provide information regarding al or national requirements. |
| 7. HAN | DLING AND STORAGE | | |
| | ndling chnical measures | causing a | tricity may accumulate and ignite suspended dust n explosion. |

and bonding, or inert atmospheres. Local/Total ventilation : Use only with adequate ventilation.

Provide adequate precautions, such as electrical grounding

according to GB/T 16483 and GB/T 17519



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|----------------|------------------------------|---|---|---|
| | | | | |
| | Advice on safe handling | | Do not breathe dust. Do not swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Handle in accordance with good industrial hygiene and s practice, based on the results of the workplace exposure sessment Minimize dust generation and accumulation. Keep container closed when not in use. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release renvironment. | |
| Avoida | ance of contact | : | Oxidizing agents | |
| Storaç | je | | | |
| | ions for safe storage | : | Store locked up. Store in accordan | abelled containers. |
| Materi | als to avoid | : | Do not store with Strong oxidizing a | the following product types: agents |
| Packa | ging material | : | Unsuitable materi | al: None known. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parame- ters / Permissible concentration | Basis |
|-------------------------------|------------|--|--|----------|
| fenbendazole | 43210-67-9 | TWA | 100 µg/m3 (OEB 2) | Internal |
| White mineral oil (petroleum) | 8042-47-5 | TWA (Inhal- able particu- late matter) | 5 mg/m3 | ACGIH |

| Engineering measures : | Use feasible engineering controls to minimize exposure to compound. All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. |
|------------------------------|--|
| Personal protective equipmen | t |
| Respiratory protection : | If adequate local exhaust ventilation is not available or expo- sure assessment demonstrates exposures outside the rec- ommended guidelines, use respiratory protection. |
| Filter type : | Combined particulates and organic vapour type |
| Eye/face protection : | Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. |

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|----------------------|--|---|--|
| Skin a Hand Ma | and body protection protection aterial ene measures | Wear a faceshie potential for dire aerosols. Work uniform o Chemical-resist If exposure to c eye flushing sys ing place. When using do Wash contamin The effective op engineering cor | eld or other full face protection if there is a ect contact to the face with dusts, mists, or r laboratory coat. cant gloves hemical is likely during typical use, provide stems and safety showers close to the work- not eat, drink or smoke. lated clothing before re-use. peration of a facility should include review of ntrols, proper personal protective equipment, |
| | | appropriate deg | powning and decontamination procedures, ne monitoring, medical surveillance and the |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | powder |
|---|---|--|
| Colour | : | tan |
| | | to |
| | | light brown |
| Odour | : | characteristic |
| Odour Threshold | : | No data available |
| рН | : | No data available |
| Melting point/freezing point | : | No data available |
| Initial boiling point and boiling range | : | No data available |
| Flash point | : | Not applicable |
| Evaporation rate | : | Not applicable |
| Flammability (solid, gas) | : | May form explosive dust-air mixture during processing, han- dling or other means. |
| Flammability (liquids) | : | Not applicable |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower | : | No data available |

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|-------------|--------------------|------------------------------|---|--------------------------|---|
| | | | | | |
| | flamma | ability limit | | | |
| | Vapou | r pressure | : | Not applicable | |
| | Relativ | e vapour density | : | Not applicable | |
| | Relativ | e density | : | No data available | 9 |
| | Density | Ý | : | No data available | 9 |
| | Solubil Wa | ity(ies) ter solubility | : | No data available | 9 |
| | Partitic octano | n coefficient: n- | : | Not applicable | |
| | | nition temperature | : | No data available | 9 |
| | Decom | position temperature | : | No data available | 9 |
| | Viscos Visc | ity cosity, kinematic | : | Not applicable | |
| | Explos | ive properties | : | Not explosive | |
| | Oxidizi | ng properties | : | The substance o | r mixture is not classified as oxidizing. |
| | Molecu | ılar weight | : | No data available | 9 |
| | Particle | e size | : | No data available | 9 |

10. STABILITY AND REACTIVITY

| Reactivity Chemical stability Possibility of hazardous reac- tions | : | Not classified as a reactivity hazard. Stable under normal conditions. May form explosive dust-air mixture during processing, han- dling or other means. Can react with strong oxidizing agents. |
|---|---|--|
| Conditions to avoid | : | Heat, flames and sparks. Avoid dust formation. |
| Incompatible materials | : | Oxidizing agents |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

11. TOXICOLOGICAL INFORMATION

Exposure routes : Inhalation Skin contact Ingestion

according to GB/T 16483 and GB/T 17519



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|---|---|---|---|
| | | | |
| | | Eye contact | |
| Acute | toxicity | Lyc contact | |
| | assified based on ava | ailable information. | |
| <u>Comp</u> | onents: | | |
| fenbe | ndazole: | | |
| Acute | oral toxicity | : LD50 (Rat): > | 10,000 mg/kg |
| | | LD50 (Mouse |): > 10,000 mg/kg |
| | mineral oil (petrole | | |
| Acute | oral toxicity | : LD50 (Rat): > | 5,000 mg/kg |
| Acute | inhalation toxicity | : LC50 (Rat): > | |
| | | Exposure time Test atmosph | |
| | | | The substance or mixture has no acute inhala |
| Acute | dermal toxicity | |): > 2,000 mg/kg |
| | | | |
| | | toxicity | The substance or mixture has no acute derma |
| | corrosion/irritation | toxicity | The substance or mixture has no acute derma |
| Not cla | assified based on ava | toxicity | The substance or mixture has no acute derma |
| Not cla | | toxicity | The substance or mixture has no acute derma |
| Not cla <u>Comp</u> fenbe | assified based on ava onents: ndazole: | toxicity ailable information. | The substance or mixture has no acute derma |
| Not cla <u>Comp</u> fenber Specie | assified based on ava onents: ndazole: es | toxicity ailable information. : Rabbit | |
| Not cla <u>Comp</u> fenbe | assified based on ava onents: ndazole: es | toxicity ailable information. | |
| Not cla <u>Comp</u> fenber Specie Result | assified based on ava onents: ndazole: es | toxicity ailable information. : Rabbit : No skin irritati | |
| Not cla <u>Comp</u> fenber Specie Result White Specie | assified based on ava onents: ndazole: es mineral oil (petrole | toxicity ailable information. : Rabbit : No skin irritati : Rabbit : Rabbit | on |
| Not cla <u>Comp</u> fenber Specie Result White | assified based on ava onents: ndazole: es mineral oil (petrole | toxicity ailable information. : Rabbit : No skin irritati | on |
| Not cla <u>Comp</u> fenber Specie Result White Specie Result | assified based on ava onents: ndazole: es mineral oil (petrole | toxicity ailable information. : Rabbit : No skin irritati : Rabbit : Rabbit : No skin irritati | on |
| Not cla <u>Comp</u> fenber Specie Result White Specie Result Specie | assified based on ava onents: ndazole: es mineral oil (petrole | toxicity ailable information. : Rabbit : No skin irritati : Rabbit : Rabbit : No skin irritati irritation | on |
| Not cla <u>Comp</u> fenber Specie Result White Specie Result Seriou Not cla | assified based on ava onents: ndazole: es mineral oil (petrole es | toxicity ailable information. : Rabbit : No skin irritati : Rabbit : Rabbit : No skin irritati irritation | on |
| Not cla <u>Comp</u> fenber Specie Result White Specie Result Seriou Not cla <u>Comp</u> | assified based on ava onents: ndazole: es mineral oil (petrole es us eye damage/eye assified based on ava | toxicity ailable information. : Rabbit : No skin irritati : Rabbit : Rabbit : No skin irritati irritation | on |
| Not cla <u>Comp</u> fenber Specie Result White Specie Result Seriou Not cla <u>Comp</u> fenber Specie | assified based on ava onents: ndazole: es mineral oil (petrole es us eye damage/eye assified based on ava onents: ndazole: es | toxicity ailable information. : Rabbit : No skin irritati : Rabbit : No skin irritati irritation ailable information. : Rabbit | on |
| Not cla <u>Comp</u> fenber Specie Result White Specie Result Seriou Not cla <u>Comp</u> fenber | assified based on ava onents: ndazole: es mineral oil (petrole es us eye damage/eye assified based on ava onents: ndazole: es | toxicity ailable information. : Rabbit : No skin irritati : Rabbit : No skin irritati irritation ailable information. | on |
| Not cla <u>Comp</u> fenber Specie Result White Specie Result Not cla <u>Comp</u> fenber Specie Result | assified based on ava onents: ndazole: es mineral oil (petrole es us eye damage/eye assified based on ava onents: ndazole: es | toxicity ailable information. : Rabbit : No skin irritati eum): : Rabbit : No skin irritati irritation ailable information. : Rabbit : No eye irritatio | on |

according to GB/T 16483 and GB/T 17519



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Result

_

: No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

White mineral oil (petroleum):

| Test Type | : Buehler Test |
|-----------------|----------------|
| Exposure routes | : Skin contact |
| Species | : Guinea pig |
| Result | : negative |

Germ cell mutagenicity

Not classified based on available information.

Components:

fenbendazole:

| Genotoxicity in vitro | Test Type: Bacterial reverse mutation assay (AMES) Result: negative | | |
|-------------------------------|--|--|--|
| | Test Type: DNA Repair Result: negative | | |
| | Test Type: Chromosomal aberration Result: negative | | |
| | Test Type: in vitro assay Test system: mouse lymphoma cells Metabolic activation: Metabolic activation Result: equivocal | | |
| White mineral oil (petroleum) | : | | |
| Genotoxicity in vitro | : Test Type: In vitro mammalian cell gene mutation test Result: negative | | |
| Genotoxicity in vivo | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Method: OECD Test Guideline 474 Result: negative Remarks: Based on data from similar materials | | |

according to GB/T 16483 and GB/T 17519



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Carcinogenicity

Not classified based on available information.

Components:

fenbendazole:

| Species Application Route Exposure time NOAEL Result | Mouse oral (feed) 2 Years 405 mg/kg body weight negative |
|--|--|
| Species | : Rat |
| Application Route | : Oral |
| Exposure time | : 2 Years |
| NOAEL | : 5 mg/kg body weight |
| Result | : negative |
| Target Organs | : Lymph nodes, Liver |

White mineral oil (petroleum):

| Species | : | Rat |
|-------------------|---|-----------|
| Application Route | : | Ingestion |
| Exposure time | : | 24 Months |
| Result | : | negative |

Reproductive toxicity

Suspected of damaging fertility. Suspected of damaging the unborn child.

Components:

| fenbendazole: | |
|-----------------------------------|---|
| Effects on fertility : | Test Type: Three-generation reproduction toxicity study Species: Rat Application Route: oral (feed) General Toxicity - Parent: NOAEL: 15 mg/kg body weight Fertility: LOAEL: 45 mg/kg body weight Result: Effects on fertility |
| Effects on foetal develop- : ment | Test Type: Development Species: Dog, female Application Route: Oral Developmental Toxicity: LOAEL: 100 mg/kg body weight Result: Embryotoxic effects and adverse effects on the off- spring were detected., No teratogenic effects Test Type: Embryo-foetal development |
| | Species: Rabbit Application Route: Oral Developmental Toxicity: NOAEL: 25 mg/kg body weight Result: Fetotoxicity |

according to GB/T 16483 and GB/T 17519



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| Test Type: Embryo-foetal development Species: Rabbit Application Route: Oral Developmental Toxicity: LOAEL: 63 mg/kg body we Test Type: Embryo-foetal development Species: Rat Application Route: Oral Developmental Toxicity: NOAEL: 120 mg/kg body we Result: No effects on foetal development Reproductive toxicity - As- sessment : Some evidence of adverse effects on sexual function fertility, based on animal experiments., Some evide adverse effects on development, based on animal experiments. Species: Rat Application Route: Skin contact Result: negative White mineral oil (petroleum): : Effects on fertility : Test Type: One-generation reproduction toxicity stu Species: Rat Application Route: Skin contact Result: negative Effects on foetal develop- ment : Test Type: Embryo-foetal development Application Route: Ingestion Result: negative STOT - single exposure Not classified based on available information. STOT - repeated exposure Material based on available information. | ersion 1 | Revision Date: 2023/09/30 | SDS Number: 7634167-00009 | | Date of last issue: 2023/04/04 Date of first issue: 2020/12/02 |
|---|-------------|------------------------------|------------------------------|---|---|
| Species: Rabbit Application Route: Oral Developmental Toxicity: LOAEL: 63 mg/kg body we Test Type: Embryo-foetal development Species: Rat Application Route: Oral Developmental Toxicity: NOAEL: 120 mg/kg body we Reproductive toxicity - As- sessment Some evidence of adverse effects on sexual function fertility, based on animal experiments., Some evide adverse effects on development, based on animal experiments. White mineral oil (petroleum): Effects on fertility Effects on foetal develop- ment Species: Rat Application Route: Skin contact Result: negative Effects on foetal develop- ment Species: Rat Application Route: Skin contact Result: negative Stot - single exposure Not classified based on available information. Stot - repeated exposure | | | | | |
| Species: Rat Application Route: Oral Developmental Toxicity: NOAEL: 120 mg/kg body or Result: No effects on foetal development Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function fertility, based on animal experiments., Some evide adverse effects on development, based on animal experiments. White mineral oil (petroleum): : Test Type: One-generation reproduction toxicity study species: Rat Application Route: Skin contact Result: negative Effects on foetal development : Test Type: Embryo-foetal development ment : Species: Rat Application Route: Ingestion Result: negative STOT - single exposure Not classified based on available information. STOT - repeated exposure : Test Type: Species: Rat | | | | Species: Rabbit Application Route Developmental T | e: Oral oxicity: LOAEL: 63 mg/kg body weight |
| sessment fertility, based on animal experiments., Some evide adverse effects on development, based on animal ments. White mineral oil (petroleum): Effects on fertility Effects on fertility : Test Type: One-generation reproduction toxicity stude Species: Rat Application Route: Skin contact Result: negative Effects on foetal development : Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Result: negative STOT - single exposure Not classified based on available information. STOT - repeated exposure : Stor - repeated exposure | | | | Species: Rat Application Route Developmental T | e: Oral oxicity: NOAEL: 120 mg/kg body weight |
| Effects on fertility Test Type: One-generation reproduction toxicity stu Species: Rat Application Route: Skin contact Result: negative Effects on foetal develop- ment Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Result: negative STOT - single exposure Not classified based on available information. STOT - repeated exposure | • | • | : | fertility, based on adverse effects of | animal experiments., Some evidence of |
| Species: Rat Application Route: Skin contact Result: negative Effects on foetal development ment Test Type: Embryo-foetal development Species: Rat Application Route: Ingestion Result: negative STOT - single exposure Not classified based on available information. STOT - repeated exposure | White | e mineral oil (petroleu | m): | | |
| ment Species: Rat Application Route: Ingestion Result: negative STOT - single exposure Not classified based on available information. STOT - repeated exposure | Effect | ts on fertility | : | Species: Rat Application Route | |
| Not classified based on available information. STOT - repeated exposure | | ts on foetal develop- | : | Species: Rat Application Route | |
| | | • • | lable | information. | |
| | | | | | |
| May cause damage to organs through prolonged or repeated exposure. Components: | | | is thr | ougn proionged or | repeated exposure. |

fenbendazole:

| Exposure routes | : | Ingestion |
|-----------------|---|--|
| Target Organs | : | Liver, Stomach, Nervous system, Lymph nodes |
| Assessment | : | May cause damage to organs through prolonged or repeated |
| | | exposure. |

Repeated dose toxicity

Components:

fenbendazole:

| Species | : | Rat |
|-------------------|---|-----------|
| LÖAEL | : | 500 mg/kg |
| Application Route | : | Oral |

Ingestion

according to GB/T 16483 and GB/T 17519



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| | | | | | |
| | | re time Organs | : | 2 Weeks Kidney, Liver | |
| N A E | | tion Route re time | : | Rat > 2,500 mg/kg Oral 30 Days No significant adv | erse effects were reported |
| L A E T | xposu | tion Route re time Organs | : | Rat 1,600 mg/kg Oral 90 Days Central nervous s Tremors | ystem |
| N L E | | | : | Dog 4 mg/kg 8 mg/kg 6 Months Stomach, Nervou | s system, Lymph nodes |
| W | Vhite r | nineral oil (petroleun | ו): | | |
| S Le A | pecies OAEL pplica | 3 | : | Rat 160 mg/kg Ingestion 90 Days | |
| L A E | | tion Route re time | | Rat >= 1 mg/l inhalation (dust/m 4 Weeks OECD Test Guide | |
| | - | t ion toxicity ssified based on availa | ble | information. | |
| | | onents: | | | |
| | | dazole: ration toxicity classification | atio | n | |
| E | xperie | ence with human exp | οςι | ıre | |
| <u>C</u> | ompo | nents: | | | |
| fe | enben | dazole: | | | |
| | | | | • • • • • | |

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: Symptoms: Rapid respiration, Salivation, anorexia, Diarrhoea

according to GB/T 16483 and GB/T 17519



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12. ECOLOGICAL INFORMATION

| Ecotoxicity | | |
|---|--|---|
| Components: | | |
| fenbendazole: | | |
| Toxicity to fish | : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.009 mg/l Exposure time: 21 d | |
| Toxicity to daphnia and other aquatic invertebrates | EC50 (Daphnia magna (Water flea)): 0.0088 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 | |
| M-Factor (Acute aquatic tox- icity) | : 100 | |
| Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity) | NOEC (Daphnia magna (Water flea)): 0.00113 mg/l Exposure time: 21 Days Method: OECD Test Guideline 211 | |
| M-Factor (Chronic aquatic toxicity) | : 10 | |
| White mineral oil (petroleum) | : | |
| Toxicity to fish | LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 | |
| Toxicity to daphnia and other aquatic invertebrates | EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 | |
| Toxicity to algae/aquatic plants | NOEC (Pseudokirchneriella subcapitata (green algae)): 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 |) |
| Toxicity to fish (Chronic tox- icity) | : NOEC (Oncorhynchus mykiss (rainbow trout)): 1,000 mg/l Exposure time: 28 d | |
| Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity) | : NOEC (Daphnia magna (Water flea)): 1,000 mg/l Exposure time: 21 d | |
| Persistence and degradability | / | |
| Components: | | |
| White mineral oil (petroleum) | : | |
| Biodegradability | : Result: Not readily biodegradable. Biodegradation: 31 % Exposure time: 28 d | |

according to GB/T 16483 and GB/T 17519



Fenbendazole (20%) Type A Formulation

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Bioaccumulative potential

Components:

fenbendazole:

Partition coefficient: n- : log Pow: 3.32 octanol/water

Mobility in soil

Components:

| fenbendazole: | | |
|--|---|--|
| Distribution among environ- mental compartments | : | log Koc: 3.8 - 4.7 Method: FDA 3.08 |

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

| Disposal | methods |
|----------|---------|
|----------|---------|

| - |
|---|
| |
| |
| - |

14. TRANSPORT INFORMATION

International Regulations

| UNRTDG UN number Proper shipping name | : | UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (fenbendazole) |
|--|---|--|
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| Environmentally hazardous | : | yes |
| IATA-DGR | | |
| UN/ID No. | : | UN 3077 |
| Proper shipping name | : | Environmentally hazardous substance, solid, n.o.s. (fenbendazole) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | Miscellaneous |
| Packing instruction (cargo | : | 956 |

according to GB/T 16483 and GB/T 17519



Fenbendazole (20%) Type A Formulation

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|----------------|---------------------------|------------------------------|----------------|---|
| | | | | |
| | | | | |
| aircra | aft) | | | |
| | ing instruction (passen- | : | 956 | |
| | aircraft) | | | |
| Envii | Environmentally hazardous | | yes | |
| IMDO | G-Code | | | |
| UN r | number | : | UN 3077 | |
| Prop | Proper shipping name | | | ALLY HAZARDOUS SUBSTANCE, SOLID, |
| | | | N.O.S. | |
| <u></u> | | | (fenbendazole) | |
| Clas | - | : | 9 | |
| Pack | ing group | : | | |
| Labe | ls | : | 9 | |
| EmS | Code | : | F-A, S-F | |
| Marii | ne pollutant | : | yes | |
| | | | | |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

GB 6944/12268

| 0 | | |
|---|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, |
| | | N.O.S. |
| | | (fenbendazole) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| Marine pollutant | : | no |
| • | | |

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

National regulatory information Law on the Prevention and Control of Occupational Diseases

Yangtze River Protection Law

This product does not contain any dangerous chemicals prohibited for inland river transport.

The components of this product are reported in the following inventories:

| AICS | : | not determined |
|-------|---|----------------|
| DSL | : | not determined |
| IECSC | : | not determined |

according to GB/T 16483 and GB/T 17519



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16. OTHER INFORMATION

| Revision Date | : | 2023/09/30 | | |
|---|---|--|--|--|
| Further information | | | | |
| Sources of key data used to compile the Safety Data Sheet | : | Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/ | | |
| Date format | : | yyyy/mm/dd | | |
| Full text of other abbreviations | | | | |
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) | | |
| ACGIH / TWA | : | 8-hour, time-weighted average | | |

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association: IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States): UN - United Nations: UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods: vPvB - Verv Persistent and Verv Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be

according to GB/T 16483 and GB/T 17519



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considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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