

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0 Revision Date: 2025/04/14 SDS Number: 3884321-00023 Date of last issue: 2024/09/28 Date of first issue: 2018/11/30

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### 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical product name : Albendazole Sulfoxide (10%) Formulation

#### Supplier's company name, address and phone number

Company name of supplier : MSD

Address : 1-13-12, Kudan-kita, Chiyoda-ku, Tokyo, Japan

Telephone : 03-6272-1099

E-mail address : EHSDATASTEWARD@msd.com

Emergency telephone number : +1-908-423-6000

#### Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product

Restrictions on use : Not applicable

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### 2. HAZARDS IDENTIFICATION

#### GHS classification of chemical product

Skin sensitisation : Category 1

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure (Oral) : Category 2 (Gastrointestinal tract, Central nervous system)

Specific target organ toxicity - repeated exposure (Oral) : Category 2 (Gastrointestinal tract, Central nervous system, Immune system, Liver)

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

#### GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0	Revision Date: 2025/04/14	SDS Number: 3884321-00023	Date of last issue: 2024/09/28 Date of first issue: 2018/11/30
-----------------	------------------------------	------------------------------	---

H361d Suspected of damaging the unborn child.  
H371 May cause damage to organs (Gastrointestinal tract, Central nervous system) if swallowed.  
H373 May cause damage to organs (Gastrointestinal tract, Central nervous system, Immune system, Liver) through prolonged or repeated exposure if swallowed.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements	:	<p><b>Prevention:</b> P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe mist or vapours. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p><b>Response:</b> P302 + P352 IF ON SKIN: Wash with plenty of water. P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage.</p> <p><b>Storage:</b> P405 Store locked up.</p> <p><b>Disposal:</b> P501 Dispose of contents/ container to an approved waste disposal plant.</p>
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### Other hazards which do not result in classification

None known.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)	ENCS No.
Albendazole Sulfoxide	54029-12-8	>= 10 - < 20	-
Polyethylene glycol sorbitan monolaurate	9005-64-5	>= 0.1 - < 1	8-55, 7-110
Benzoic acid	65-85-0	>= 0.1 - < 1	3-1397

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version  
11.0

Revision Date:  
2025/04/14

SDS Number:  
3884321-00023

Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30



### 4. FIRST AID MEASURES

General advice	: In the case of accident or if you feel unwell, seek medical advice 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	: Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	: If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: May cause an allergic skin reaction. Suspected of damaging the unborn child. May cause damage to organs if swallowed. May cause damage to organs through prolonged or repeated exposure if swallowed.
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. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Alcohol-resistant foam Carbon dioxide (CO <sub>2</sub> ) Dry chemical
Unsuitable extinguishing media	: None known.
Specific hazards during fire-fighting	: Exposure to combustion products may be a hazard to health.
Hazardous combustion products	: Carbon oxides Nitrogen oxides (NO <sub>x</sub> ) Sulphur oxides
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0	Revision Date: 2025/04/14	SDS Number: 3884321-00023	Date of last issue: 2024/09/28 Date of first issue: 2018/11/30
-----------------	------------------------------	------------------------------	---

Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

## 7. HANDLING AND STORAGE

### Handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Do not get on skin or clothing.  
Do not breathe mist or vapours.  
Do not swallow.  
Avoid contact with eyes.  
Wash skin thoroughly after handling.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Do not eat, drink or smoke when using this product.

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0	Revision Date: 2025/04/14	SDS Number: 3884321-00023	Date of last issue: 2024/09/28 Date of first issue: 2018/11/30
-----------------	------------------------------	------------------------------	---

Avoidance of contact Hygiene measures	Take care to prevent spills, waste and minimize release to the environment. : Oxidizing agents : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before re-use. The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.
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### Storage

Conditions for safe storage	: Keep in properly labelled containers. Store locked up. Store in accordance with the particular national regulations.
Materials to avoid	: Do not store with the following product types: Strong oxidizing agents
Packaging material	: Unsuitable material: None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Threshold limit value and permissible exposure limits for each component in the work environment

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Concentra- tion standard / Permissible con- centration	Basis
Albendazole Sulfoxide	54029-12-8	TWA	45 µg/m <sup>3</sup> (OEB 3)	Internal
Further information: DSEN				
Benzoic acid	65-85-0	Wipe limit TWA (Inhal- able fraction and vapor)	100 µg/100 cm <sup>2</sup> 0.5 mg/m <sup>3</sup>	Internal ACGIH

### Engineering measures

- : Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip-less quick connections).  
All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.  
Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face con-

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version  
11.0

Revision Date:  
2025/04/14

SDS Number:  
3884321-00023

Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30

tainment devices).  
Minimize open handling.

### Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type : Combined particulates and organic vapour type

Hand protection

|| Material : Chemical-resistant gloves

|| Remarks

Eye protection : Consider double gloving.  
: Wear safety glasses with side shields or goggles.  
If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.  
Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

Skin and body protection : Work uniform or laboratory coat.  
Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.  
Use appropriate degowning techniques to remove potentially contaminated clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : suspension

Colour : white

Odour : No data available

Odour Threshold : No data available

Melting point/freezing point : No data available

Boiling point, initial boiling point and boiling range : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

Lower explosion limit and upper explosion limit / flammability limit  
Upper explosion limit / Up- : No data available  
per flammability limit

Lower explosion limit / : No data available

Lower flammability limit

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0      Revision Date: 2025/04/14      SDS Number: 3884321-00023      Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30

---

Flash point	: Not applicable
Decomposition temperature	: No data available
pH	: No data available
Evaporation rate	: No data available
Auto-ignition temperature	: No data available
Viscosity	
Viscosity, kinematic	: No data available
Solubility(ies)	
Water solubility	: No data available
Partition coefficient: n-octanol/water	: Not applicable
Vapour pressure	: No data available
Density and / or relative density	
Relative density	: No data available
Density	: No data available
Relative vapour density	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: No data available
Particle characteristics	
Particle size	: No data available

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## 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Can react with strong oxidizing agents.
Conditions to avoid	: None known.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: No hazardous decomposition products are known.

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## 11. TOXICOLOGICAL INFORMATION

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0      Revision Date: 2025/04/14      SDS Number: 3884321-00023      Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30

---

Information on likely routes of exposure : Inhalation  
Skin contact  
Ingestion  
Eye contact

### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

#### Components:

##### **Albendazole Sulfoxide:**

Acute oral toxicity : LD50 (Mouse): 1,500 mg/kg  
LD50 (Rat): 2,400 mg/kg

Acute toxicity (other routes of administration) : LD50 (Rat): 265 mg/kg  
Application Route: Intravenous

##### **Polyethylene glycol sorbitan monolaurate:**

Acute inhalation toxicity : LC50 (Rat): > 5.1 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity

##### **Benzoic acid:**

Acute oral toxicity : LD50 (Rat): 2,250 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 12.2 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

##### **Skin corrosion/irritation**

Not classified based on available information.

#### Components:

##### **Albendazole Sulfoxide:**

Species : Rabbit  
Result : No skin irritation

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version  
11.0

Revision Date:  
2025/04/14

SDS Number:  
3884321-00023

Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30

### Polyethylene glycol sorbitan monolaurate:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

### Benzoic acid:

Species	:	Guinea pig
Result	:	Skin irritation

### Serious eye damage/eye irritation

Not classified based on available information.

### Components:

#### Albendazole Sulfoxide:

Species	:	Rabbit
Result	:	No eye irritation

#### Polyethylene glycol sorbitan monolaurate:

Species	:	Rabbit
Result	:	No eye irritation

#### Benzoic acid:

Species	:	Rabbit
Result	:	Irreversible effects on the eye

### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Not classified based on available information.

### Components:

#### Albendazole Sulfoxide:

Test Type	:	Maximisation Test
Exposure routes	:	Dermal
Assessment	:	Probability or evidence of low to moderate skin sensitisation rate in humans
Result	:	positive

Test Type	:	Maximisation Test
Exposure routes	:	Dermal
Result	:	Sensitiser

**Albendazole Sulfoxide (10%) Formulation**Version  
11.0Revision Date:  
2025/04/14SDS Number:  
3884321-00023Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30**Polyethylene glycol sorbitan monolaurate:**

Test Type	:	Maximisation Test
Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative

**Benzoic acid:**

Test Type	:	Local lymph node assay (LLNA)
Exposure routes	:	Skin contact
Species	:	Mouse
Result	:	negative

**Germ cell mutagenicity**

Not classified based on available information.

**Components:****Albendazole Sulfoxide:**

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
		Test Type: Chromosomal aberration Test system: Chinese hamster ovary cells Result: negative
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse Cell type: Bone marrow Result: negative

**Polyethylene glycol sorbitan monolaurate:**

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
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**Benzoic acid:**

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Result: equivocal
		Test Type: in vitro micronucleus test Result: negative
Genotoxicity in vivo	:	Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Rat Application Route: Ingestion Result: negative

**Carcinogenicity**

Not classified based on available information.

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version  
11.0

Revision Date:  
2025/04/14

SDS Number:  
3884321-00023

Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30

### Components:

#### Albendazole Sulfoxide:

Species	:	Mouse
Application Route	:	Oral
Exposure time	:	2 Years
NOAEL	:	400 mg/kg body weight
Result	:	negative
Species	:	Rat
Application Route	:	Oral
Exposure time	:	2 Years
NOAEL	:	20 mg/kg body weight
Result	:	negative
Carcinogenicity - Assessment	:	No evidence of carcinogenicity in animal studies.

#### Reproductive toxicity

Suspected of damaging the unborn child.

### Components:

#### Albendazole Sulfoxide:

Effects on fertility	:	Test Type: Fertility Species: Rat Application Route: Oral Fertility: NOAEL: 30 mg/kg body weight Result: No effects on fertility
Effects on foetal development	:	Test Type: Development Species: Rat Application Route: Oral Developmental Toxicity: LOAEL: 10 mg/kg body weight Result: Embryotoxic effects., Skeletal malformations
	:	Test Type: Development Species: Rabbit Application Route: Oral Developmental Toxicity: LOAEL: 30 mg/kg body weight Result: Embryotoxic effects., Skeletal malformations, Maternal toxicity observed.
	:	Test Type: Development Species: Rat Application Route: Oral Developmental Toxicity: NOAEL: 5.8 mg/kg body weight Result: Effects on postnatal development
	:	Test Type: Development Species: Rat Application Route: Oral Developmental Toxicity: LOAEL: 7 mg/kg body weight

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version  
11.0

Revision Date:  
2025/04/14

SDS Number:  
3884321-00023

Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30

Result: Embryotoxic effects and adverse effects on the offspring were detected.

Reproductive toxicity - Assessment : Suspected of damaging the unborn child.

### Polyethylene glycol sorbitan monolaurate:

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative

### Benzoic acid:

Effects on fertility : Test Type: Four-generation reproduction toxicity study  
Species: Rat  
Application Route: Ingestion  
Result: negative

### STOT - single exposure

May cause damage to organs (Gastrointestinal tract, Central nervous system) if swallowed.

### Components:

#### Albendazole Sulfoxide:

Exposure routes : Oral  
Target Organs : Gastrointestinal tract, Central nervous system  
Assessment : May cause damage to organs.

### STOT - repeated exposure

May cause damage to organs (Gastrointestinal tract, Central nervous system, Immune system, Liver) through prolonged or repeated exposure if swallowed.

### Components:

#### Albendazole Sulfoxide:

Exposure routes : Oral  
Target Organs : Gastrointestinal tract, Central nervous system, Immune system, Liver  
Assessment : May cause damage to organs through prolonged or repeated exposure.

### Benzoic acid:

Exposure routes : inhalation (dust/mist/fume)  
Target Organs : Lungs  
Assessment : Shown to produce significant health effects in animals at concentrations of 0.02 mg/l/6h/d or less.

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0 Revision Date: 2025/04/14 SDS Number: 3884321-00023 Date of last issue: 2024/09/28 Date of first issue: 2018/11/30

---

### Repeated dose toxicity

#### Components:

##### **Albendazole Sulfoxide:**

Species	:	Rat
LOAEL	:	168 mg/kg
Application Route	:	Oral
Exposure time	:	4 Weeks
Target Organs	:	Gastrointestinal tract, Testis
Symptoms	:	Diarrhoea, Vomiting
Species	:	Dog
LOAEL	:	48 mg/kg
Application Route	:	Oral
Exposure time	:	4 Weeks
Target Organs	:	Gastrointestinal tract
Symptoms	:	Diarrhoea, Vomiting
Species	:	Mouse
LOAEL	:	40 mg/kg
Application Route	:	Oral
Exposure time	:	3 Months
Target Organs	:	Blood, Liver, Nose
Symptoms	:	Hematologic effects, Liver effects
Species	:	Rat
LOAEL	:	>= 30 mg/kg
Application Route	:	Oral
Exposure time	:	6 Months
Target Organs	:	Blood
Symptoms	:	Hematologic effects
Species	:	Dog
LOAEL	:	40 mg/kg
Application Route	:	Oral
Exposure time	:	6 Months
Target Organs	:	Blood, Liver
Symptoms	:	Hematologic effects, Liver effects
Species	:	Rat
NOAEL	:	7 mg/kg
Application Route	:	Oral
Exposure time	:	60 d
Target Organs	:	Liver, Testis
Symptoms	:	Liver effects, male reproductive effects

##### **Benzoic acid:**

Species	:	Rat
LOAEL	:	< 0.025 mg/l
Application Route	:	inhalation (dust/mist/fume)
Exposure time	:	28 Days

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0 Revision Date: 2025/04/14 SDS Number: 3884321-00023 Date of last issue: 2024/09/28 Date of first issue: 2018/11/30

---

### Aspiration toxicity

Not classified based on available information.

### Experience with human exposure

#### Components:

##### **Albendazole Sulfoxide:**

General Information	: Symptoms: Allergic reactions, hair loss, Gastrointestinal disturbance, Headache, Dizziness
Skin contact	: Target Organs: Skin Symptoms: Allergic reactions Remarks: May cause sensitisation by skin contact.
Ingestion	: Target Organs: Gastrointestinal tract Symptoms: Gastrointestinal disturbance, Diarrhoea, Abdominal pain  Target Organs: Central nervous system Symptoms: Headache, Dizziness  Target Organs: Liver Symptoms: liver function change  Target Organs: Immune system Symptoms: immune system effects

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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **Albendazole Sulfoxide:**

Toxicity to fish	: EC50 (Brachydanio rerio (zebrafish)): 0.042 mg/l Exposure time: 144 hrs
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0.068 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: EC50 (Raphidocelis subcapitata (freshwater green alga)): 0.024 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	: 10
M-Factor (Chronic aquatic	: 10

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version  
11.0

Revision Date:  
2025/04/14

SDS Number:  
3884321-00023

Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30

toxicity)

### **Polyethylene glycol sorbitan monolaurate:**

Toxicity to fish : LL50 (Danio rerio (zebra fish)): > 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 10 mg/l  
Exposure time: 21 d  
Method: OECD Test Guideline 211

### **Benzoic acid:**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 44.6 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Method: EPA-660/3-75-009

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 33.1 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

EC10 (Pseudokirchneriella subcapitata (green algae)): 3.4 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 25 mg/l  
Exposure time: 21 d  
Method: OECD Test Guideline 211

Toxicity to microorganisms : IC50: > 1,000 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209

### **Persistence and degradability**

#### **Components:**

##### **Polyethylene glycol sorbitan monolaurate:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: > 60 %  
Exposure time: 28 d

##### **Benzoic acid:**

Biodegradability : Result: rapidly degradable  
Biodegradation: 89.5 %  
Exposure time: 35 d

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0 Revision Date: 2025/04/14 SDS Number: 3884321-00023 Date of last issue: 2024/09/28 Date of first issue: 2018/11/30

---

### Bioaccumulative potential

#### Components:

##### **Albendazole Sulfoxide:**

Partition coefficient: n-octanol/water : log Pow: 1.27  
pH: 7

##### **Benzoic acid:**

Partition coefficient: n-octanol/water : log Pow: 1.88

##### **Mobility in soil**

No data available

##### **Hazardous to the ozone layer**

Not applicable

##### **Other adverse effects**

No data available

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## 13. DISPOSAL CONSIDERATIONS

#### **Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.  
Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
If not otherwise specified: Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

#### **International Regulations**

##### **UNRTDG**

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Albendazole Sulfoxide)

Class : 9  
Packing group : III  
Labels : 9  
Environmentally hazardous : yes

##### **IATA-DGR**

UN/ID No. : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(Albendazole Sulfoxide)

Class : 9  
Packing group : III  
Labels : Miscellaneous  
Packing instruction (cargo) : 964

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0 Revision Date: 2025/04/14 SDS Number: 3884321-00023 Date of last issue: 2024/09/28 Date of first issue: 2018/11/30

---

aircraft)

Packing instruction (passenger aircraft) : 964

Environmentally hazardous : yes

### IMDG-Code

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Albendazole Sulfoxide)

Class : 9

Packing group : III

Labels : 9

EmS Code : F-A, S-F

Marine 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

Refer to section 15 for specific national regulation.

### 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.

ERG Code : 171

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## 15. REGULATORY INFORMATION

### Related Regulations

#### Fire Service Law

Not applicable to dangerous materials / designated flammables.

#### Chemical Substance Control Law

Priority Assessment Chemical Substance

Chemical name	Number
Mono(or poly)ether of (mono ester of anhydro(or dianhydro)glucitol and dodecanoic acid) and alpha-hydro-omega-hydroxypoly(oxyethylene)	222

#### Industrial Safety and Health Law

#### Harmful Substances Prohibited from Manufacture

Not applicable

#### Harmful Substances Required Permission for Manufacture

Not applicable

#### Substances Prevented From Impairment of Health

Not applicable

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version  
11.0

Revision Date:  
2025/04/14

SDS Number:  
3884321-00023

Date of last issue: 2024/09/28  
Date of first issue: 2018/11/30

### **Circular concerning Information on Chemicals having Mutagenicity - Annex 2: Information on Existing Chemicals having Mutagenicity**

Not applicable

### **Circular concerning Information on Chemicals having Mutagenicity - Annex 1: Information on Notified Substances having Mutagenicity**

Not applicable

### **Substances Subject to be Notified Names**

Law Article 57-2 (Ministerial Order Article 34-2 Appended Table 2)

Chemical name	Concentration (%)	Remarks
benzoic acid	>=0.1 - <1	From April 1st, 2025

### **Substances Subject to be Indicated Names**

Not applicable

### **Skin and Eye Damage Substances (ISHL MO Art. 594-2)**

Not applicable

### **Carcinogenic Substances (Article 577-2 of the Occupational Health and Safety Regulations)**

Not applicable

### **Ordinance on Prevention of Hazards Due to Specified Chemical Substances**

Not applicable

### **Ordinance on Prevention of Lead Poisoning**

Not applicable

### **Ordinance on Prevention of Tetraalkyl Lead Poisoning**

Not applicable

### **Ordinance on Prevention of Organic Solvent Poisoning**

Not applicable

### **Enforcement Order of the Industrial Safety and Health Law - Attached table 1 (Dangerous Substances)**

Not applicable

### **Poisonous and Deleterious Substances Control Law**

Not applicable

### **Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof**

Not applicable

### **High Pressure Gas Safety Act**

Not applicable

### **Explosive Control Law**

Not applicable

### **Vessel Safety Law**

Miscellaneous dangerous substances and articles (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)

# SAFETY DATA SHEET



## Albendazole Sulfoxide (10%) Formulation

Version 11.0 Revision Date: 2025/04/14 SDS Number: 3884321-00023 Date of last issue: 2024/09/28 Date of first issue: 2018/11/30

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### Aviation Law

Miscellaneous dangerous substances and articles (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

### Marine Pollution and Sea Disaster Prevention etc Law

Bulk transportation : Noxious liquid substance(Category Z)  
Pack transportation : Classified as marine pollutant

### Narcotics and Psychotropics Control Act

Narcotic or Psychotropic Raw Material (Export / Import Permission)  
Not applicable  
Specific Narcotic or Psychotropic Raw Material (Export / Import permission)  
Not applicable

### Waste Disposal and Public Cleansing Law

Industrial waste

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

AICS : not determined  
DSL : not determined  
IECSC : not determined

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## 16. OTHER INFORMATION

In this SDS, if the concentration of substances subject to notification under the Industrial Safety and Health Law is indicated as a range, it includes cases where it is a trade secret.

### 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/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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 Sys-

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tem; 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 - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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 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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