

**Albendazole / Closantel Sodium Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 06.07.2024
5.0	14.04.2025	10843094-00015	Date of first issue: 26.08.2022

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**SECTION 1. IDENTIFICATION**

Product name : Albendazole / Closantel Sodium Formulation

Other means of identification : Closal (A005093)

**Manufacturer or supplier's details**

Company : MSD

Address : Talcahuano 750, 6th floor, Ciudad Autonoma  
Buenos Aires, Argentina C1013AAP

Telephone : 908-740-4000

Emergency telephone : 1-908-423-6000

E-mail address : EHSDATASTEWARD@msd.com

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

Recommended use : Veterinary product

Restrictions on use : Not applicable

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**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Skin sensitization : Category 1

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.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**  
P261 Avoid breathing mist or vapors.  
P272 Contaminated work clothing should not be allowed out of the workplace.

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P273 Avoid release to the environment.

P280 Wear protective gloves.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of water.

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.

**Disposal:**

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

**Other hazards which do not result in classification**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Components**

Chemical name	CAS-No.	Concentration (% w/w)
Closantel	57808-65-8	$\geq 2,5$ -< 5
Albendazole Sulfoxide	54029-12-8	$\geq 1$ -< 2,5
Octamethylcyclotetrasiloxane	556-67-2	$\geq 0,025$ -< 0,1

**SECTION 4. FIRST AID MEASURES**

- |   |   |
|---|---|
| General advice  | : In the case of accident or if you feel unwell, seek medical advice immediately.<br>When symptoms persist or in all cases of doubt seek medical advice.  |
| If inhaled  | : If inhaled, remove to fresh air.<br>Get medical attention.  |
| In case of skin contact                                     | : In case of contact, immediately flush skin with soap and plenty of water.<br>Remove contaminated clothing and shoes.<br>Get medical attention.<br>Wash clothing before reuse.<br>Thoroughly clean shoes before reuse. |
| In case of eye contact                                      | : Flush eyes with water as a precaution.<br>Get medical attention if irritation develops and persists.  |
| If swallowed  | : If swallowed, DO NOT induce vomiting.<br>Get medical attention.<br>Rinse mouth thoroughly with water.<br>Never give anything by mouth to an unconscious person.   |
| Most important symptoms and effects, both acute and delayed | : May cause an allergic skin reaction.  |
| 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).   |

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Notes to physician : Treat symptomatically and supportively.

**SECTION 5. FIRE-FIGHTING 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>)  
Sulfur oxides  
Chlorine compounds  
Iodine compounds  
Metal oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

**SECTION 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 diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.

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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.

## SECTION 7. HANDLING AND STORAGE

- 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 vapors.  
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.  
Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labeled containers.  
Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:  
Strong oxidizing agents  
Gases

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Closantel	57808-65-8	TWA	$\geq 10 < 100$ $\mu\text{g}/\text{m}^3$ (OEB 3)	Internal
Albendazole Sulfoxide	54029-12-8	TWA	45 $\mu\text{g}/\text{m}^3$ (OEB 3)	Internal
Further information: DSEN				
		Wipe limit	100 $\mu\text{g}/100 \text{ cm}^2$	Internal

- 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 containment devices).

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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              | : | Particulates type  |
| Hand protection          | : |  |
| Material                 | : | Chemical-resistant gloves  |
| Remarks                  | : | Consider double gloving.   |
| Eye protection           | : | Wear safety glasses with side shields or goggles.<br>If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.<br>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.<br>Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.<br>Use appropriate degowning techniques to remove potentially contaminated clothing.  |
| Hygiene measures         | : | If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.<br>When using do not eat, drink or smoke.<br>Contaminated work clothing should not be allowed out of the workplace.<br>Wash contaminated clothing before re-use.<br>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. |

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- |   |   |                              |
|---|---|------------------------------|
| Appearance                              | : | suspension, Aqueous solution |
| Color                                   | : | white, off-white             |
| Odor                                    | : | odorless                     |
| Odor Threshold                          | : | No data available            |
| pH                                      | : | 8,5 - 10,5                   |
| Melting point/freezing point            | : | No data available            |
| Initial boiling point and boiling range | : | No data available            |
| Flash point                             | : | No data available            |

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Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	1,035 - 1,051
Density	:	No data available
Solubility(ies)		
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, kinematic	:	70 - 300 m <sup>2</sup> /s
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Molecular weight	:	No data available
Particle characteristics		
Particle size	:	< 80 µm

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**SECTION 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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## SECTION 11. TOXICOLOGICAL INFORMATION

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: > 5.000 mg/kg  
Method: Calculation method

**Components:****Closantel:**

Acute oral toxicity : LD50 (Rat, female): 262 mg/kg

**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

**Octamethylcyclotetrasiloxane:**

Acute oral toxicity : LD50 (Rat): > 4.800 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): 36 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2.375 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

**Octamethylcyclotetrasiloxane:**

Species : Rabbit

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Result : No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

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

Species : Rabbit  
Result : No eye irritation

**Octamethylcyclotetrasiloxane:**

Species : Rabbit  
Result : No eye irritation

**Respiratory or skin sensitization****Skin sensitization**

May cause an allergic skin reaction.

**Respiratory sensitization**

Not classified based on available information.

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

Test Type : Maximization Test  
Routes of exposure : Dermal  
Assessment : Probability or evidence of low to moderate skin sensitization rate in humans  
Result : positive

Test Type : Maximization Test  
Routes of exposure : Dermal  
Result : Sensitizer

**Octamethylcyclotetrasiloxane:**

Test Type : Maximization Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : negative

**Germ cell mutagenicity**

Not classified based on available information.

**Components:****Closantel:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)

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Species: Mouse  
Application Route: Ingestion  
Result: negative

**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

**Octamethylcyclotetrasiloxane:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

Test Type: In vitro mammalian cell gene mutation test  
Result: negative

Test Type: Chromosome aberration test in vitro  
Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)  
Species: Rat  
Application Route: Inhalation  
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Components:****Closantel:**

Species : Rat  
Application Route : Ingestion  
Exposure time : 2 Years  
Result : negative

**Albendazole Sulfoxide:**

Species : Mouse  
Application Route : Oral  
Exposure time : 2 Years  
NOAEL : 400 mg/kg body weight  
Result : negative

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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.
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**Reproductive toxicity**

Not classified based on available information.

**Components:****Closantel:**

Effects on fetal development	: Test Type: Three-generation reproduction toxicity study Species: Rat Application Route: Ingestion Result: negative
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**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 fetal 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 Result: Embryotoxic effects and adverse effects on the offspring were detected.
Reproductive toxicity - Assessment	: Suspected of damaging the unborn child.

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**Octamethylcyclotetrasiloxane:**

Effects on fertility	:	Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Inhalation Method: OPPTS 870.3800 Result: positive
Effects on fetal development	:	Test Type: Embryo-fetal development Species: Rabbit Application Route: Inhalation Result: negative
Reproductive toxicity - Assessment	:	Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

**STOT-single exposure**

Not classified based on available information.

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

Routes of exposure	:	Oral
Target Organs	:	Gastrointestinal tract, Central nervous system
Assessment	:	May cause damage to organs.

**STOT-repeated exposure**

Not classified based on available information.

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

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

**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	:	Diarrhea, Vomiting

Species	:	Dog
LOAEL	:	48 mg/kg
Application Route	:	Oral
Exposure time	:	4 Weeks
Target Organs	:	Gastrointestinal tract

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|| Symptoms : Diarrhea, 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 :  $\geq 30$  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

**Octamethylcyclotetrasiloxane:**

|| Species : Rat  
|| NOAEL : 1,82 mg/l  
|| Application Route : inhalation (vapor)  
|| Exposure time : 2 y

|| Species : Rabbit  
|| NOAEL :  $\geq 960$  mg/kg  
|| Application Route : Skin contact  
|| Exposure time : 3 Weeks

**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 sensitization by skin contact.

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Ingestion	:	Target Organs: Gastrointestinal tract Symptoms: Gastrointestinal disturbance, Diarrhea, 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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## SECTION 12. ECOLOGICAL INFORMATION

## Ecotoxicity

Components:**Closantel:**

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 0,01 - 0,1 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials
M-Factor (Acute aquatic toxicity)	:	10
M-Factor (Chronic aquatic toxicity)	:	10

**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 toxicity)	:	10

**Octamethylcyclotetrasiloxane:**

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 0,022 mg/l Exposure time: 96 h Remarks: No toxicity at the limit of solubility.
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 0,015 mg/l Exposure time: 48 h Remarks: No toxicity at the limit of solubility.

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Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): > 0,022 mg/l Exposure time: 96 h Remarks: No toxicity at the limit of solubility.  EC10 (Pseudokirchneriella subcapitata (green algae)): >= 0,022 mg/l Exposure time: 96 h Remarks: No toxicity at the limit of solubility.
Toxicity to fish (Chronic toxicity)	:	NOEC (Oncorhynchus mykiss (rainbow trout)): 0,0044 mg/l Exposure time: 14 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0,0079 mg/l Exposure time: 21 d
M-Factor (Chronic aquatic toxicity)	:	10

**Persistence and degradability****Components:****Octamethylcyclotetrasiloxane:**

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 3,7 % Exposure time: 29 d Method: OECD Test Guideline 310
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**Bioaccumulative potential****Components:****Closantel:**

Partition coefficient: n-octanol/water	:	log Pow: > 4 Remarks: Expert judgment
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**Albendazole Sulfoxide:**

Partition coefficient: n-octanol/water	:	log Pow: 1,27 pH: 7
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**Octamethylcyclotetrasiloxane:**

Bioaccumulation	:	Species: Pimephales promelas (fathead minnow) Bioconcentration factor (BCF): 12.400 Method: OPPTS 850.1730
Partition coefficient: n-octanol/water	:	log Pow: 6,488 Method: OECD Test Guideline 123

**Mobility in soil**

No data available

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**Other adverse effects**

No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

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

**SECTION 14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Closantel, 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. (Closantel, Albendazole Sulfoxide)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964
Environmentally hazardous	:	yes

**IMDG-Code**

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

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**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.

**SECTION 15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture**

Argentina. Carcinogenic Substances and Agents Registry. : Not applicable

Control of precursors and essential chemicals for the preparation of drugs. : Not applicable

**The ingredients of this product are reported in the following inventories:**

AICS : not determined

DSL : not determined

IECSC : not determined

**SECTION 16. OTHER INFORMATION**

Revision Date : 14.04.2025  
Date format : dd.mm.yyyy

**Further information**

Sources of key data used to compile the Material 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.

**Full text of other abbreviations**

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

**Albendazole / Closantel Sodium Formulation**

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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; TECL - 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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