

## Chemical Safety Data Sheet MSDS / SDS

## ENDOSULFAN ALCOHOL

Revision Date:2026-05-31 Revision Number:1

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

## Product identifier

Product name : ENDOSULFAN ALCOHOL  
CBnumber : CB9471421  
CAS : 2157-19-9  
EINECS Number : 218-467-6  
Synonyms : Endosulfandiols

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

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

## Company Identification

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

## SECTION 2: Hazards identification

## GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Danger

## Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P262 Do not get in eyes, on skin, or on clothing.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

## Hazard statements

H410 Very toxic to aquatic life with long lasting effects

## SECTION 3: Composition/information on ingredients

## Substance

|              |                                                                |
|--------------|----------------------------------------------------------------|
| Product name | : ENDOSULFAN ALCOHOL                                           |
| Synonyms     | : Endosulfandiol                                               |
| CAS          | : 2157-19-9                                                    |
| EC number    | : 218-467-6                                                    |
| MF           | : C <sub>9</sub> H <sub>8</sub> Cl <sub>6</sub> O <sub>2</sub> |
| MW           | : 360.88                                                       |

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately.

In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

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

No data available

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

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

Carbon oxides

Hydrogen chloride gas

### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

## 5.4 Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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# SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area.

Avoid generation of dusts.

## 6.4 Reference to other sections

For disposal see section 13.

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# SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

### Advice on safe handling

Work under hood. Do not inhale substance/mixture.

### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage conditions

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

### Storage class

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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# SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

### Ingredients with workplace control parameters

## 8.2 Exposure controls

### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

#### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:KCL 741 L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:KCL 741 L

#### Body Protection

protective clothing

#### Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

#### Control of environmental exposure

Do not let product enter drains.

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

|                   |                   |
|-------------------|-------------------|
| a) Physical state | solid             |
| b) Color          | No data available |
| c) Odor           | No data available |

|                                                 |                                                                                  |
|-------------------------------------------------|----------------------------------------------------------------------------------|
| d) Melting point/freezing point                 | Melting point/ range: 212 - 213 °C                                               |
| e) Initial boiling point and boiling range      | 411.8±40.0 °C(Predicted)                                                         |
| f) Flammability (solid, gas)                    | No data available                                                                |
| g) Upper/lower flammability or explosive limits | No data available                                                                |
| h) Flash point                                  | > 100 °C                                                                         |
| i) Autoignition temperature                     | No data available                                                                |
| j) Decomposition temperature                    | No data available                                                                |
| k) pH                                           | No data available                                                                |
| l) Viscosity                                    | Viscosity, kinematic: No data available<br>Viscosity, dynamic: No data available |
| m) Water solubility                             | at 20 °C slightly soluble                                                        |
| n) Partition coefficient n-octanol/water        | No data available                                                                |
| o) Vapor pressure                               | No data available                                                                |
| p) Density                                      | 1.5459 (estimate)                                                                |
| Relative density                                | 1.5459 (estimate)                                                                |
| q) Relative vapour density                      | No data available                                                                |
| r) Particle characteristics                     | No data available                                                                |
| s) Explosive properties                         | No data available                                                                |
| t) Oxidizing properties                         | none                                                                             |
| Solubility                                      | Methanol (Slightly, Sonicated)                                                   |

## 9.2 Other safety information

No data available

# SECTION 10: Stability and reactivity

## 10.1 Reactivity

No data available

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 10.3 Possibility of hazardous reactions

No data available

## 10.4 Conditions to avoid

no information available

## 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - 18 mg/kg

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Endosulfan

LC50 Inhalation - Rat - 4 h - 80 mg/m<sup>3</sup> - dust/mist

Remarks: (in analogy to similar products)

LD50 Dermal - Rabbit - 90 mg/kg

Remarks: (in analogy to similar products)

#### Skin corrosion/irritation

Classified based on available data. For more details, see section 2

#### Serious eye damage/eye irritation

Classified based on available data. For more details, see section 2

#### Respiratory or skin sensitization

Classified based on available data. For more details, see section 2

#### Germ cell mutagenicity

Classified based on available data. For more details, see section 2

#### Carcinogenicity

Classified based on available data. For more details, see section 2

#### Reproductive toxicity

Classified based on available data. For more details, see section 2

#### Specific target organ toxicity - single exposure

Classified based on available data. For more details, see section 2

#### Specific target organ toxicity - repeated exposure

Classified based on available data. For more details, see section 2

#### Aspiration hazard

Classified based on available data. For more details, see section 2

### 11.2 Additional Information

RTECS: DT5300000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Kidney -

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## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish flow-through test LC50 - Fish - 0,0066 mg/l - 96 h

Remarks: (in analogy to similar products)

Toxicity to daphnia LC50 - Daphnia magna (Water flea) - 0,1 - 1 mg/l - 48 h and other aquatic Remarks: (ECOTOX Database) invertebrates

## 12.2 Persistence and degradability

No data available

## 12.3 Bioaccumulative potential

Bioaccumulation other fish - 21 d - 0,0001 mg/l (Endosulfan alcohol)

Bioconcentration factor (BCF): 9.908

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Endocrine disrupting properties

No data available

## 12.7 Other adverse effects

No data available

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# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

No data available

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# SECTION 14: Transport information

## 14.1 UN number

ADR/RID: 3077

IMDG: 3077

IATA: 3077

## 14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Endosulfan alcohol)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Endosulfan alcohol)

IATA: Environmentally hazardous substance, solid, n.o.s. (Endosulfan alcohol)

## 14.3 Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA: 9

#### 14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

#### 14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: yes

#### 14.6 Special precautions for user

Tunnel restriction code : (-)

Further information: EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. Packages smaller than or equal to 5 kg / L , not dangerous goods of

Class 9

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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## SECTION 15: Regulatory information

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

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

National legislation

Seveso III: Directive 2012/18/EU of the H2 ACUTE TOXIC

European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

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

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

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## SECTION 16: Other information

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road

AIRC - Australian Inventory of Industrial Chemicals

ASTM -American Society for the Testing of Materials

bw - Body weight

CMR - Carcinogen,Mutagen or Reproductive Toxicant

DIN - Standard of the German Institute forStandardisation

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

GHS - Globally HarmonisedSystem

GLP - Good Laboratory Practice

IARC - International Agency for Research onCancer

IATA - International Air Transport Association

IBC - International Code for theConstruction 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 - InternationalMaritime Dangerous Goods

IMO - International Maritime Organisation

ISHL - IndustrialSafety and Health Law (Japan)

ISO - International Organisation for Standardisation

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

NO(A)EC - No Observed (Adverse) Effect Concentration

NO(A)EL - No Observed (Adverse) Effect Level

NOELR - No Observable Effect LoadingRate

NZIoC - New Zealand Inventory of Chemicals

OECD - Organisation for EconomicCo-operation and Development

OPPTS - Office of Chemical Safety and PollutionPrevention

PBT - Persistent, Bioaccumulative and Toxic substance

PICCS - PhilippinesInventory of Chemicals and Chemical Substances

(Q)SAR - (Quantitative) StructureActivity Relationship

REACH - Regulation (EC) No 1907/2006 of the EuropeanParliament and of the Council concerning the Registration, Evaluation, Authorisation andRestriction of Chemicals

RID - Regulations concerning the International Carriage ofDangerous Goods by Rail

SADT - Self-Accelerating Decomposition Temperature

SDS -Safety Data Sheet

TCSI - Taiwan Chemical Substance Inventory

TECI - ThailandExisting 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

**Disclaimer:**

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