

## Chemical Safety Data Sheet MSDS / SDS

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

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : ALDOLASE  
CBnumber : CB1702817  
CAS : 9024-52-6  
EINECS Number : 232-781-0  
Synonyms : Aldolase,Aldolase from rabbit muscle

**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

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**SECTION 2: Hazards identification****GHS Label elements, including precautionary statements**

Symbol(GHS) : No data available  
Signal word : No data available

**Precautionary statements**

No data available

**Hazard statements**

No data available

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**SECTION 3: Composition/information on ingredients****Substance**

Product name : ALDOLASE  
Synonyms : Aldolase,Aldolase from rabbit muscle  
CAS : 9024-52-6

EC number : 232-781-0

MF : n.a.

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## SECTION 4: First aid measures

### **If inhaled**

After inhalation: fresh air.

### **In case of skin contact**

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

### **In case of eye contact**

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

### **If swallowed**

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

### **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

### **Protection of first-aiders**

For personal protection see section 8.

### **Notes to physician**

No data available

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## SECTION 5: Firefighting measures

### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### **Unsuitable extinguishing media**

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

### **Specific hazards during fire fighting**

Not combustible. Ambient fire may liberate hazardous vapours.

### **Hazardous combustion products**

Nitrogen oxides (NO<sub>x</sub>) Sulfur oxides

### **Specific extinguishing methods**

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

### **Special protective equipment for fire-fighters**

In the event of fire, wear self-contained breathing apparatus.

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

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

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

### **Environmental precautions**

Do not let product enter drains.

### **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 with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

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

### **Handling**

For precautions see section 2.2.

### **Storage**

#### **Further information on storage conditions**

Tightly closed.

#### **Storage class**

12, Non Combustible Liquids

#### **Recommended storage temperature**

2 - 8 °C

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

### **Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **Engineering measures**

No data available

### **Personal protective equipment**

#### **Respiratory protection**

Not required; except in case of aerosol formation.

#### **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

**Hand protection**

**Material**

Nitrile rubber

**Break through time**

480 min

**Glove thickness**

0.11 mm

**Protective index**

Full contact

**Manufacturer**

(KCL 740 / Aldrich Z677272, Size M)

**Material**

Nitrile rubber

**Break through time**

480 min

**Glove thickness**

0.11 mm

**Protective index**

Splash contact

**Manufacturer**

(KCL 740 / Aldrich Z677272, Size M)

**Manufacturer**

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

**Remarks**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Hygiene measures**

Change contaminated clothing. Wash hands after working with substance.

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

suspension

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**Color**

white

**Odor**

No data available

**Odor Threshold**

No data available

**pH**

No data available

**Melting point/ range**

No data available

**Boiling point/boiling range**

No data available

**Flash point**

No data available

**Evaporation rate**

No data available

**Flammability (solid, gas)**

No data available

**Flammability (liquids)**

The product is not flammable.

**Burning rate**

No data available

**Self-ignition**

Not applicable

**Upper explosion limit / Upper flammability limit**

Not applicable

**Lower explosion limit / Lower flammability limit**

Not applicable

**Vapor pressure**

No data available

**Relative vapor density**

No data available

**Relative density**

No data available

#### **Density**

No data available

#### **Water solubility**

No data available

#### **Partition coefficient: n-octanol/water**

No data available

#### **Autoignition temperature**

Not applicable

#### **Decomposition temperature**

No data available

#### **Viscosity, dynamic**

No data available

#### **Viscosity, kinematic**

No data available

#### **Flow time**

No data available

#### **Explosive properties**

Not classified as explosive.

#### **Oxidizing properties**

none

#### **Particle characteristics Particle size**

No data available

#### **Physical state**

powder

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

#### **Reactivity**

No data available

#### **Chemical stability**

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

## Possibility of hazardous reactions

Violent reactions possible with: The generally known reaction partners of water.

## Conditions to avoid

no information available

## Incompatible materials

No data available

## Hazardous decomposition products

In the event of fire: see section 5

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# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Mixture Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

### Skin corrosion/irritation

Remarks: No data available

### Serious eye damage/eye irritation

Remarks: No data available

### Respiratory or skin sensitization

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

### Reproductive toxicity

No data available

### Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

No data available

### Aspiration hazard

No data available

## 11.2 Additional Information

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

### Components ammonium sulphate

#### Acute toxicity

LD50 Oral - Rat - male and female - 4,250 mg/kg (OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 434)

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

Skin - Rabbit

Result: No skin irritation - 20 h

Remarks: (ECHA)

#### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: No eye irritation

Remarks: (ECHA)

#### **Respiratory or skin sensitization**

Maximization Test - Guinea pig

Result: negative (US-EPA)

#### **Germ cell mutagenicity**

Test Type: Ames test

Test system: S. typhimurium

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Human lymphocytes

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster lung cells

Result: negative

Species: Mouse - male - Bone marrow

Remarks: (ECHA)

#### **Carcinogenicity**

No data available

#### **Reproductive toxicity**

No data available

#### **Specific target organ toxicity - single exposure**

No data available

#### **Specific target organ toxicity - repeated exposure Aspiration hazard**

No data available

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## **SECTION 12: Ecological information**

### **Ecotoxicity**

#### **Toxicity to fish**

Remarks: No data available

#### **Components:**

**ammonium sulphate:**



### **Toxicity to fish**

LC50 (Oncorhynchus mykiss (rainbow trout)): 53 mg/l End point: mortality Exposure time: 96 h Analytical monitoring: yes Remarks: (ECHA)

### **Toxicity to daphnia and other aquatic invertebrates**

EC50 (Ceriodaphnia (water flea)): 121.7 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes  
Method: US-EPA

### **Toxicity to algae/aquatic plants**

ErC50 (Chlorella vulgaris (Fresh water algae)): 2,700 mg/l Exposure time: 18 Days Test Type: static test Remarks: (ECHA)

### **Toxicity to fish (Chronic toxicity)**

EC10 (Lepomis macrochirus): 5.29 mg/l Exposure time: 30 d Test Type: flow-through test Analytical monitoring: yes Remarks: (ECHA)

### **Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**

EC10 (Daphnia): 3.12 mg/l End point: reproduction rate Exposure time: 70 d Test Type: semi-static test Analytical monitoring: yes Method: US-EPA

### **Toxicity to microorganisms**

EC50 (activated sludge): 1,618 mg/l Exposure time: 30 min Test Type: static test Method: OECD Test Guideline 209

## **Persistence and degradability**

### **Biodegradability**

Remarks: No data available

### **Components:**

#### **ammonium sulphate:**

### **Biodegradability**

Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

## **Bioaccumulative potential**

### **Bioaccumulation**

Remarks: No data available

### **Components:**

#### **ammonium sulphate:**

### **Partition coefficient: octanol/water**

Remarks: Not applicable for inorganic substances

### **Mobility in soil**

### **Stability in soil**

Remarks: No data available

### **Other adverse effects**

### **Components:**

#### **ammonium sulphate:**

### **Results of PBT and vPvB assessment**

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

### **Additional ecological information**

Biological effects: Fertilising effect possible. Discharge into the environment must be avoided.

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## **SECTION 13: Disposal considerations**

### **Disposal methods**

#### **Waste from residues**

Offer surplus and non-recyclable solutions to a licensed disposal company.

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## **SECTION 14: Transport information**

### **International Regulations**

#### **IATA-DGR**

UN/ID No. : Not applicable

Proper shipping name : Not applicable

Class : Not applicable

Subsidiary risk : Not applicable

Packing group : Not applicable

Labels : Not applicable

Packing instruction (cargo aircraft) : Not applicable

Packing instruction (passenger aircraft) : Not applicable

#### **IMDG-Code**

UN number : Not applicable

Proper shipping name : Not applicable

Class : Not applicable

Subsidiary risk : Not applicable

Packing group : Not applicable

Labels : Not applicable

EmS Code : Not applicable

Marine pollutant : no

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

Not applicable for product as supplied.

National regulation GB 6944/12268

UN number : Not applicable

Proper shipping name : Not applicable

Class : Not applicable

Subsidiary risk : Not applicable

Packing group : Not applicable

Labels : Not applicable

## Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

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## SECTION 15: Regulatory information

Registration/Notification number : Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the SDS as well as the local/national regulations concerning the chemical.

### National regulatory information

#### Regulations on Safety Management of Hazardous Chemicals

#### Catalogue of Hazardous Chemicals

#### Hazardous Chemicals for Priority Management

Not applicable under SAWS

#### China. List of Explosive Precursors

Not applicable

#### Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

#### China Severely Restricted Toxic Chemicals for Import and Export

Not applicable

#### Measures on the Environmental Administration of New Chemical Substances Registration

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## SECTION 16: Other information

### Full text of other abbreviations

AIIIC - 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)

EC<sub>x</sub> - Concentration associated with x% response

EL<sub>x</sub> - 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

ATA - 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

**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.