

SAFETY DATA SHEET

Section 1: Product & Company Identification

Product name: ALPHA ACETOLACTATE DECARBOXYLASE

Product code: ALDC **CAS-No:** 9025-02-9

Product use: Prevent diacetyl formation during fermentation **Supplier name and address:** The Brewing Science Institute

106 Glen Dale Dr, Woodland Park Colorado 80863

Phone: 719-482-4895

In emergency call 911.

Date of SDS preparation: August 15, 2025

Section 2: Hazard(s) Identification

Respiratory sensitization, Category 1

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Hazard pictograms (CLP)



GHS08

Signal word (CLP): Danger

Contains: Alpha-acetolactate decarboxylase (ALDC)

Hazard Statements (CLP): H334- May cause allergies or asthma symptoms or breathing difficulties if inhaled

Precautionary statements (CLP):

P261- Avoid breathing dust/fume/gas/mist/vapours/spray

P284- Wear respiratory protection

P304+P340- IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P501- Dispose of contents/Container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Section 3: Composition/ Information on Ingredients

Chemical Name	CAS#	%
GLYCEROL	56-81-5	50-75
Decarboxylase, Acetolactate	9025-02-9	5-15

Section 4: First-Aid Measures

Eye contact: If eye irritation persists: Get medical advice/attention.

Skin contact: Wash skin with plenty of water.

Inhalation: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory

symptoms. Call a poison center or a doctor.

Swallowing: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

Section 5: Fire-Fighting Measures

Fire hazard: No fire hazard.

Extinguishing media: Water spray, Dry powder, foam, carbon dioxide. **Unsuitable extinguishing media:** Do not use a heavy water stream.

Flash point: Not available.
Flammable limits: Not available.
Explosion limits: Not available.

Firefighting instructions: Fight fire from safe distances and protected location. Do not enter fire protective

equipment, including respiratory protection.

Protection during Firefighting: Do not attempt to take action without protective equipment. Use self-

contained breathing apparatus and protective gear.

Specific hazard: Hazardous combustion products may include carbon oxides (CO/CO2); acrolein may form

from heated glycerol.

Section 6: Accidental Release Measures

Ensure adequate ventilation. Use personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray. Recover the product with absorbent material. Take up liquid spill into absorbent material. Dispose of materials or solid residues at an authorized site by methods consistent with Federal, State and Local regulations.

Section 7: Handling and Storage

Handling: Ensure good ventilation of the workstation. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapor/spray. Wash thoroughly after handling it.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Storage: Store in a well-ventilated place. Keep cool. Store in accordance with local regulations.

Section 8: Exposure Controls/Personal Protection

General protection: An approved respirator should be worn when exposure is expected to be usually high.

Local Name: Glycerol **WEL TWA:** 15 mg/m³

Specific engineering controls: Ensure good ventilation of the workstation.

Eye Protection: Safety glasses, safety goggles

Skin and body protection: Wear suitable protective clothing

Hand Protection: Protective gloves

Environmental exposure control: Avoid release to the environment.

Section 9: Physical and Chemical Properties

Physical state: Liquid

Color: Amber

Odor: Barely perceptible odor **Odor threshold:** No data available

pH: 4-4.5

Melting point: No data available Freezing point: No data available Boiling point: No data available Flash point: No data available Evaporation rate: No data available Flammability: Not applicable

Upper/lower flammability or explosive limits: No data available

Auto ignition temperature: No data available

Explosive properties: No data available

Viscosity: No data available

Vapor pressure: No data available Vapor density: No data available Relative density: 1.12 - 1.18 Solubility in water: Soluble

Partition Coefficient: No data available

Section 10: Stability and Reactivity

Reactivity: Non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable under normal conditions

Conditions to avoid: None under recommended storage and handling conditions

Incompatible materials: No additional information available

Hazardous decomposition products: Under normal conditions of storage and use, hazardous

decomposition products should not be produced.

Section 11: Toxicological Information

Acute toxicity (oral): Not classified
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified

ALPHA ACETOLACTATE DECARBOXYLASE (9025-02-9)

LD50 oral rat : 12600 mg/kg LD50 oral : >10000 mg/kg **GLYCEROL (56-81-5)**

LD50 Oral rat: 27 mg/kg bodyweight Animal: rat, Animal sex: female

Skin Corrosion/Irritation: Not classified; product pH is not in corrosive or irritant range. **Serious Eye Damage/Irritation:** Not classified; product pH is not in corrosive or irritant range.

Respiratory or Skin sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified STOT-single exposure: Not classified STOT-repeated exposure: Not classified Aspiration hazard: Not classified

Section 12: Ecological Information (non-mandatory)

Ecology general – The product is not considered harmful to aquatic organism nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified Hazardous to the aquatic environment, long-term (chronic): Not classified

Not rapidly degradable

ALPHA ACETOLACTATE DECARBOXYLASE (9025-02-9)

EC50- other aquatic organisms: > 500 mg/l

GLYCEROL (56-81-5)

LC50 Fish: 54000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)

Persistence and degradability: No information available **Bioaccumulative potential: No** information available

Mobility in Soil: No information available

Results of PBT and vPvB assessment: No information available

Other adverse effects: No information available

Section 13: Disposal Considerations (non-mandatory)

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Section 14: Transport Information (non-mandatory)

Not a DOT controlled, or government regulated material.

Section 15: Regulatory Information (non-mandatory)

Contains no substance subject to Regulation

Contains no substance on the REACH candidate list, and with Annex XVII restrictions

TSCA (Toxic Substances Control Act): Not applicable

SARA Section 313 (specific toxic chemical listings): Not applicable

SARA 311/312 Hazardous Categorization: Not applicable

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs): Not applicable

National Regulations: No additional information available

Chemical Safety Assessment: No chemical safety assessment has been carried out

Section 16: Other Information

SDS prepared by: The Brewing Science Institute, Email: info@brewingscience.com

SDS creation date: 08/15/2025

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