

Safety Data Sheet

#90037660 · Full 16-section SDS

According to Regulation (EC) No 1907/2006
According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
α-Ketoglutaric acid disodium salt hydrate	305-72-6	C5H4Na2O5.xH2O (Water not included in Molecular weight)	10	23 Jul 2026

SECTION 1

Identification

Product name	α-Ketoglutaric acid disodium salt hydrate
CAS number	305-72-6
Chemical formula	C5H4Na2O5.xH2O (Water not included in Molecular weight)
Molecular weight	190.06
SMILES	C(CC(=O)[O-])C(=O)C(=O)[O-].O.O.[Na+].[Na+]
EC / EINECS number	206-167-8
Recommended use & restrictions	For research use only.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

NONE

CODE	PRECAUTIONARY STATEMENT
P280	Wear protective gloves/protective clothing/eye protection/face protection
Other hazards (e.g. PBT / vPvB, not classified)	Does not contain components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB). Does not contain components considered to have endocrine-disrupting properties. Does not meet PBT or vPvB criteria under REACH Annex XIII.

SECTION 3

Composition / information on ingredients

Purity / concentration	100 %
Impurities / stabilising additives	None

SECTION 4

First-aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. In case of persistent throat irritation or coughing: seek medical attention.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Contact a physician if discomfort continues.
Eye contact	Remove contact lenses if present. Rinse eyes with water. If eye irritation persists: get medical advice/attention.
Ingestion	Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.
Symptoms / effects & medical attention	See section 11.

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Foam, carbon dioxide, dry powder or water fog. Water spray
Unsuitable extinguishing media	None known
Special hazards	Carbon oxides Sodium oxides Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.
Advice for firefighters	In the event of fire, wear self-contained breathing apparatus. Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

Personal precautions & PPE	Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Containment & clean-up methods	Absorb spillage with a suitable absorbent material.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Wear protective clothing, gloves, eye and face protection. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
Conditions for safe storage (incompatibilities)	Store at ambient temperature. Store in a dry place. Store in a closed container.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL)	<i>No data available</i>
DNEC/PNEC data	<i>No data available</i>
Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Nitrile gloves Thickness: 0.11mm. Breakthrough time: 480mins. For personal protection standards, see Section 16.
Respiratory protection	Not required Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL)	<i>Not applicable</i>
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Flash point	<i>Not applicable</i>
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Acidity	Neutral DERIVED FROM: LITERATURE
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Appearance / physical state	Solid DERIVED FROM: LITERATURE
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Colour	White to off-white DERIVED FROM: LITERATURE
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Odour	Not known DERIVED FROM: LITERATURE
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Melting / freezing point	- DERIVED FROM: LITERATURE
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Boiling point	- DERIVED FROM: LITERATURE
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Solubility (water)	<i>No data available</i>
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pH	- DERIVED FROM: LITERATURE
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Vapour pressure	- DERIVED FROM: LITERATURE
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Partition coefficient (log Pow)	- DERIVED FROM: LITERATURE
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Auto-ignition / decomposition temp	- DERIVED FROM: LITERATURE
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SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under the prescribed storage conditions
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Conditions to avoid	Excessive heat.
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Incompatible materials	<i>No data available</i>
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Hazardous decomposition products	See section 5
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SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50) *Not applicable*

Skin corrosion / irritation *Not applicable*

Eye corrosion / irritation *Not applicable*

Respiratory / skin sensitisation *Not applicable*

Carcinogenicity *Not applicable*

Mutagenicity *Not applicable*

Reproductive toxicity *Not applicable*

STOT (single / repeated exposure) *Not applicable*

Aspiration hazard *Not applicable*

Endocrine disruptors *Not applicable*

SECTION 12

Ecological information

Aquatic toxicity *Not applicable*

Persistence & degradability *Not applicable*

Bioaccumulative potential *Not applicable*

Mobility in soil *Not applicable*

PBT / vPvB assessment *Not applicable*

SECTION 13

Disposal considerations

Waste treatment / disposal methods Dispose of in accordance with local/national regulations

SECTION 14

Transport information

UN number	Not applicable
Proper shipping name	Not applicable
Class	Not applicable
Packing group	Not applicable
Transport category	Not applicable
Tunnel code	Not applicable
Packing instruction (ADR)	Not applicable
Packing instruction (IMDG)	Not applicable
Environmental hazards	Not applicable
Special precautions for user	Not applicable

SECTION 15

Regulatory information

REACH code	Y113
UFI code	Not applicable
ECHA notification	Not applicable
Chemical safety assessment carried out?	Not applicable

SECTION 16

Other information

Revision notes / other information	Eye/Face protection should comply with EN ISO 16321-1:2022. Alternative CAS No.: 1282616-74-3
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