

Creation Date 31-Jan-2011

Revision Date 05-Dec-2011

Revision Number 2

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product Identifier**

**Product Description:** alpha-Ketoglutaric acid sodium salt  
**Cat No.** 439350000; 439350050; 439350250; 439351000  
**Synonyms** 2-Oxoglutaric acid monosodium salt; 2-Oxopentanedioic acid monosodium salt; Sodium hydrogen 2-oxoglutarate

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

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**  
 Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium  
**E-mail address** begel.sdsdesk@thermofisher.com

**Emergency Telephone Number**

For information in the US, call: 001-800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11  
  
 Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 001-201-796-7100  
  
 CHEMTREC Phone Number, US: 001-800-424-9300  
 CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16*

**Symbol(s)** Xi - Irritant  
**R-phrases(s)** none  
**Risk Combination Phrases** R36/37/38 - Irritating to eyes, respiratory system and skin

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**SECTION 2. HAZARDS IDENTIFICATION**

Label Elements



Signal Word

Warning

Hazard Statements

H319 - Causes serious eye irritation  
H315 - Causes skin irritation  
H335 - May cause respiratory irritation

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Other Hazards

No information available.

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

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Sodium hydrogen 2-oxoglutarate 22202-68-2	EEC No. 244-836-6	>95	22202-68-2	Xi; R36/37/38	Eye Irrit. 2 (H319) STOT SE 3 (H335) Skin Irrit. 2 (H315)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

**SECTION 4. FIRST AID MEASURES**

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**SECTION 4. FIRST AID MEASURES****Description of first aid measures****General Advice**

Immediate medical attention is not required Show this safety data sheet to the doctor in attendance If symptoms persist, call a physician

**Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Obtain medical attention.

**Ingestion**

Do not induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

**Protection of First-aiders  
Notes to Physician**

Use personal protective equipment  
Treat symptomatically

**SECTION 5. FIRE-FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Extinguishing media which must not be used for safety reasons**

No information available.

**Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating gases and vapors

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

**Environmental precautions**

Should not be released into the environment.

**Methods and material for containment and cleaning up**

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

**SECTION 7. HANDLING AND STORAGE**

**Precautions for Safe Handling**

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Conditions for safe storage, including any incompatibilities**

Keep containers tightly closed in a dry, cool and well-ventilated place. Handle under nitrogen and protect from moisture..

**Specific End Uses**

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Biological limit values** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)** No information available.  
**Predicted No Effect Concentration (PNEC)** No information available.

**Exposure controls**

**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location Ensure adequate ventilation, especially in confined areas

**Personal protective equipment**

- Eye Protection** Safety glasses with side-shields
- Hand Protection** Protective gloves
- Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure
- Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Hygiene Measures** When using, do not eat, drink or smoke Remove and wash contaminated clothing before re-use Provide regular cleaning of equipment, work area and clothing

**Environmental exposure controls** Do not allow material to contaminate ground water system

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Solid
<b>Appearance</b>	White
<b>odor</b>	No information available
<b>pH</b>	3.6 @ 20°C 0.5% aq.sol.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point/Range	Not applicable
Melting Point/Range	No information available.
Flash Point	No information available.
Autoignition Temperature	No information available.
Molecular Formula	C5 H5 Na O5
Molecular Weight	168.08

**SECTION 10. STABILITY AND REACTIVITY****Reactivity****Chemical Stability**

Stable under recommended storage conditions. Hygroscopic.

**Possibility of Hazardous Reactions**

<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions .</b>	None under normal processing..

**Conditions to Avoid**

Incompatible products, Excess heat, Avoid dust formation, Exposure to moist air or water.

**Incompatible Materials**

Strong oxidizing agents, Strong acids.

**Hazardous Decomposition Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Sodium oxides..

**SECTION 11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity****Component Information****Chronic Toxicity**

<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product
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<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available

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**SECTION 11. TOXICOLOGICAL INFORMATION**

<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Target Organs</b>	Skin Respiratory system Eyes
<b>Endocrine Disruptor Information</b>	None known

**SECTION 12. ECOLOGICAL INFORMATION****Toxicity**

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

**Persistence and degradability**

No information available

**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

**Results of PBT and vPvB assessment****Other adverse effects**

No information available

**SECTION 13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Waste from Residues / Unused Products** Dispose of in accordance with local regulations

**Contaminated Packaging Other Information**

Empty containers should be taken to local recyclers for disposal  
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used

**SECTION 14. TRANSPORT INFORMATION****IMDG/IMO**

Not regulated

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**SECTION 14. TRANSPORT INFORMATION**

ADR Not regulated

IATA Not regulated

**SECTION 15. REGULATORY INFORMATION**

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

**International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Sodium hydrogen 2-oxoglutarate	244-836-6	-		-	-	-	-	-	-	-	-

**Legend**

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- CHINA** - China Inventory of Existing Chemical Substances
- AICS** - Inventory of Chemical Substances
- KECL** - Existing and Evaluated Chemical Substances

**Chemical Safety Assessment**

**SECTION 16. OTHER INFORMATION**

**Full text of R-phrases referred to under sections 2 and 3**  
 R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date 05-Dec-2011  
 Revision Summary Not applicable  
 This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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**SECTION 16. OTHER INFORMATION****Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet