

Safety Data Sheet

1. Product and Company Identification

1) Product identification

Product Name: (1S)-3-OXOCYCLOHEXANE-1-CARBOXYLIC ACID
Catalog Number: D96696
CAS Number: 21531-46-4

2) Recommended use of the chemical and restrictions on use

Identified uses: Laboratory chemicals, Manufacture of substances

3) Details of the supplier of the safety data sheet

Company: AstaTech, Inc.
Keystone Business Park
2525 Pearl Buck Road
Bristol, PA 19007
USA

Tel: +1-215-785-3197
Fax: +1-215-785-2656

2. Hazard Identification

1) GHS pictogram



2) GHS signal word

Warning

3) GHS hazard statement(s)

H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

4) GHS precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/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.

3. Composition/Information on Ingredients

Substances

Component: (1S)-3-OXOCYCLOHEXANE-1-CARBOXYLIC ACID
CAS Number: 21531-46-4
Formula: C7H10O3
Molecular Weight: 142.15
Concentration: <=100%

4. First Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Fire-fighting Measures

1) Extinguishing media

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

2) Special hazards arising from the substance or mixture

Carbon oxides

3) Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

6. Accidental Release Measures

1) Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

2) Environmental precautions

Do not let product enter drains.

3) Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

4) Reference to other sections

For disposal see section 13.

7. Handling and Storage

1) Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
For precautions see section 2.

2) Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.
Store temperature: Room temperature

8. Exposure Controls/Personal Protection

1) Exposure limits

No data available

2) Appropriate engineering controls

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

3) Personal protective equipment

Respiratory protection: Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Hand protection: Nitrile gloves.

Eye protection: Safety glasses.
Skin and body protection: Lab coat.

9. Physical and Chemical Properties

<i>Appearance:</i>	Pale-yellow to Yellow-brown Solid
<i>Odor:</i>	No data available
<i>Odor threshold:</i>	No data available
<i>pH:</i>	No data available
<i>Melting point/freezing point:</i>	No data available
<i>Initial boiling point and boiling range:</i>	No data available
<i>Flash point:</i>	No data available
<i>Evaporation rate:</i>	No data available
<i>Flammability:</i>	No data available
<i>Upper/lower flammability or explosive limits:</i>	No data available
<i>Vapor pressure:</i>	No data available
<i>Vapor density:</i>	No data available
<i>Relative density:</i>	No data available
<i>Solubility(ies):</i>	No data available
<i>Partition coefficient: n-octanol/water:</i>	No data available
<i>Auto-ignition temperature:</i>	No data available
<i>Decomposition temperature:</i>	No data available
<i>Viscosity:</i>	No data available

10. Stability and Reactivity

1) Reactivity

No data available

2) Chemical stability

Stable under recommended storage conditions

3) Possibility of hazardous reactions

No data available

4) Conditions to avoid

No data available

5) Incompatible materials

Strong oxidizing agents

6) Hazardous decomposition products

No data available

11. Toxicological Information

<i>Acute toxicity:</i>	No data available
<i>Skin corrosion/irritation:</i>	No data available
<i>Serious eye damage/eye irritation:</i>	No data available
<i>Respiratory or skin sensitization:</i>	No data available
<i>Germ cell mutagenicity:</i>	No data available
<i>Carcinogenicity</i>	
<i>IARC:</i>	No data available
<i>ACGIH:</i>	No data available
<i>NTP:</i>	No data available
<i>OSHA:</i>	No data available
<i>Reproductive toxicity:</i>	No data available
<i>Routes of Exposure:</i>	Inhalation, Eye contact, Ingestion, Skin contact
<i>Specific target organ toxicity:</i>	No data available
<i>Aspiration hazard:</i>	No data available

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

12. Ecological Information

<i>Ecotoxicity</i>	
<i>Fish:</i>	No data available
<i>Crustacea:</i>	No data available
<i>Algae:</i>	No data available
<i>Persistence and degradability:</i>	No data available
<i>Bioaccumulative potential (BCF):</i>	No data available
<i>Mobility in soil:</i>	No data available
<i>Partition coefficient:</i>	No data available
<i>n-octanol/water (log Pow):</i>	No data available
<i>Soil adsorption (Koc):</i>	No data available
<i>Henry`s Law:</i>	No data available
<i>constant (PaM3/mol):</i>	No data available

13. Disposal Information

1) Disposal of product

It is the generator`s responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator

equipped with an afterburner and scrubber system. The product should not be allowed to enter the environment, drains, water ways, or the soil. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

2) Disposal of container

Dispose of as unused product. Do not re-use empty containers.

3) Other considerations

Observe all federal, state and local regulations when disposing of the substance.

14. Transport Information

UN Number: Not dangerous goods

Class: Not dangerous goods

Packing Group: Not dangerous goods

Proper shipping name: (1S)-3-OXOCYCLOHEXANE-1-CARBOXYLIC ACID

15. Regulatory Information

No data available

16. Other Information

Revision: 4

Revision date: 5/15/2020

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. AstaTech, Inc. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.