

Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: (S)-3-Hydroxypyrrolidin-2-one

Compound ID: AG003CM1 CAS Number: 34368-52-0

Indentified uses: Laboratory chemicals, manufacture of chemical compounds

Company: Angene

2. HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion/irritation,(Category 2), H315

Serious eye damage/eye irritation,(Category 2A), H319

Specific target organ toxicity, single exposure; Respiratory tract irritation, (Category 3), H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

Pictogram



Signal Word warning

Hazard statements

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

Precautionary statements

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

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes.Remove contact lenses,if

present and easy to do. Continue rinsing.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: (S)-3-Hydroxypyrrolidin-2-one

CAS Number: 34368-52-0 Molecular Formula: C4H7NO2

Molecular Weight: 101.1039 g/mol

4. FIRST AID MEASURES

Description of 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. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2 or section 11)

Indication of any immediate medical attention and special treatment needed

no data available

5. FIREFIGHTING MEASURES

Extinguishing media Suitable extinguishing media

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

Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Hydrogen bromide gas

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

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.

Environmental precautions

Do not let product enter drains.

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.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

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.

Conditions for safe storage, including any incompatibilities

Keep in dry area.

2-8℃.

Specific end use(s)

Apart from the uses mentioned in section 1, no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

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.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance / Form: solid

no data available Odor: Odor Threshold: no data available pH: no data available Melting point: >99°C (dec.)

Boiling point/range: 363.6°C at 760 mmHg Flash point: no data available Evapouration rate: no data available Flammability: no data available Upper/lower flammability: no data available no data available explosive limits: Vapor pressure: no data available no data available Vapour density: Relative density: no data available Water solubility: no data available Partition coefficient: no data available no data available Auto-ignition temperature: Decomposition Temp: no data available log Pow: no data available no data available Viscosity: Explosive properties: no data available Oxidizing properties: no data available

Other safety information no data available

10. STABILITY AND REACTIVITY

Reactivity: no data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions no data available Conditions to avoid no data available no data available Incompatible materials Hazardous decomposition products no data available

Other decomposition products: no data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Oral Rat LD50>11,500mg/kg

Dermal: no data available no data available Skin corrosion/irritation: Serious eye damage/irritation no data available

Respiratory or skin sensitisation The preceding data, or interpretation of data, was determined using Quantitative Structure

Activity Relationship (QSAR) modeling.

no data available

Germ cell mutagenicity

Carcinogenicity:

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified

as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified

as a carcinogen or potential carcinogen by ACGIH.

No component of this product present at levels greater than or equal to 0.1% is identified NTP:

as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified OSHA:

as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Specific target organ toxicity - single

exposure

Specific target organ toxicity -

no data available

repeated exposure

Aspiration hazard no data available Additional Information RTECS: Not available

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

Inhalation - May cause respiratory irritation.

12. ECOLOGICAL INFORMATION

no data available Toxicity Persistence and degradability no data available Bioaccumulative potential no data available Mobility in soil no data available

Results of PBT and vPvB PBT/vPvB assessment not available as chemical safety assessment not required/not

conducted assessment no data available Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a

licensed professional waste disposal service to dispose of this material.

Contaminated packaging Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US) This substance is considered to be non-hazardous for transport. **IMDG** This substance is considered to be non-hazardous for transport. IATA This substance is considered to be non-hazardous for transport.

15. REGULATORY INFORMATION

No chemicals in this material are subject to the reporting requirements of SARA Title III,

SARA 302: Section 302.

SARA 313: This material does not contain any chemical components with known CAS numbers that

exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section

313.

SARA 311/312 Hazards Acute Health Hazard

Massachusetts Right To Know

Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Components

New Jersey Right To Know

Components

California Prop. 65 Components This product does not contain any chemicals known to State of California to cause cancer,

birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity Eye Irrit. Eve irritation Skin Irrit. Skin irritation H315 Causes skin irritation H319 Causes serious eye irritation H335 May cause respiratory irritation

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a quide. 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. Angene shall not be held liable for any damage resulting from handling or from contact with the above product. See invoice or packing slip for additional terms and conditions of sale.