

# SDS

## SAFETY DATA SHEET

Oakwood Products, Inc  
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 Estill, SC 29918  
[www.oakwoodchemical.com](http://www.oakwoodchemical.com)

**Phone Numbers:**

Product Information	803-739-8800
Transportation Emergency	800-451-8346
Outside the USA	760-602-8700

**MATERIAL IDENTIFICATION**

NAME: (2R,4S)-4-Hydroxypyrrolidine-2-carboxylic acid  
 CAS#: [3398-22-9]  
 CAT#: 208780  
 For R&D use only.

**HAZARDS IDENTIFICATION****GHS Classification**

Acute toxicity, oral (Category 4)  
 Skin corrosion/irritation (Category 2)  
 Serious eye damage/eye irritation (Category 2A)  
 Sensitisation, respiratory (Category 1)  
 Respiratory tract irritation (Category 3)

**GHS Label elements, including precautionary statements**

Pictograms



Signal Word

Warning

Hazard Statement(s)

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation

Precautionary Statement(s)

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.
P342 + P311	IF experiencing respiratory symptoms: call a POISON CENTER or

doctor/physician.

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**COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : trans-4-Hydroxy-D-proline  
Formula : C<sub>5</sub>H<sub>9</sub>NO<sub>3</sub>  
Molecular Weight : 131.13 g/mol

CAS	Description	Concentration
3398-22-9	(2R,4S)-4-Hydroxypyrrolidine-2-carboxylic acid	95+%

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**FIRST AID MEASURES****In case of eye contact**

Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

**In case of skin contact**

Wash thoroughly with soap and plenty of water. Seek medical attention.

**If inhaled**

Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

**If swallowed**

Do not induce vomiting. Give water to victim to drink. Seek medical attention.

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**FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual fire and explosion hazards/decomposition of product**

emits toxic fumes under fire conditions.

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**ACCIDENTAL RELEASE MEASURES****Personal precautions**

Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

**Environmental precautions**

Prevent further leakage if safe to do so.

**Methods and materials for containment and clean up**

Absorb spills on sand or vermiculite and place in closed container for disposal.

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**HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.

**Precautions for safe storage**

Keep container tightly closed. Store in a cool, dry, well-ventilated area.

Air sensitive

Moisture sensitive.

**EXPOSURE CONTROL/PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Eye/face protection**

Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Hand/skin protection**

Avoid all direct contact with product.

Wear chemical-resistant gloves.

Wear protective clothing and boots.

After contact with skin, wash immediately.

**Respiratory protection**

Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

**PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Solid
Odour	no data available
Odour Threshold	no data available
Melting point/Freezing Point	261°C(dec.)
Boiling Point	no data available
Flash Point	no data available
Evaporation Rate	no data available
Flammability (solid, gas)	no data available
Upper/Lower Flammability or Explosive limits	no data available
Vapour pressure	no data available
Relative Density	no data available
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Refractive Index	no data available

## STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

Air.

Moisture.

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

May evolve carbon monoxide, carbon dioxide, and nitrogen oxides.

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## TOXICOLOGICAL INFORMATION

### Acute toxicity

no data available

### Skin corrosion/irritation

Causes skin irritation

### Serious eye damage/eye irritation

Causes serious eye irritation

### Respiratory or skin sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### STOT-single exposure

May cause respiratory irritation

### STOT-repeated exposure

no data available

### Aspiration hazard

no data available

### Exposure Routes

May be harmful to skin, eyes, and respiratory system.

May have harmful effects if inhaled or swallowed.

To the best of our knowledge, the health hazards of this material have not been fully investigated.

**ECOLOGICAL INFORMATION****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**DISPOSAL CONSIDERATIONS**

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

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**TRANSPORT INFORMATION****DOT**

Classed non-hazardous for shipping.

**IMDG**

Classed non-hazardous for shipping.

**IATA**

Classed non-hazardous for shipping.

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**REGULATORY INFORMATION****SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

**New Jersey Right to Know Components**

This product may contain a chemical on the New Jersey Right to Know Components List.

(2R,4S)-4-Hydroxypyrrolidine-2-carboxylic acid

**CAS**

3398-22-9

**California Prop. 65 Components**

This product may contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

## **OTHER INFORMATION**

Version : 1.0

Revision Date : 8/1/2013

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.