

# SDS

## SAFETY DATA SHEET

Oakwood Products, Inc  
730 Columbia HWY N  
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

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**MATERIAL IDENTIFICATION**

NAME: 4,4'-(Diazene-1,2-diyl)bis(4-cyanopentanoic acid) (contains up to 18% water)

CAS#: [2638-94-0]

CAT#: 212738

For R&D use only.

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

Flammable liquids (Category 2)

Self-reactive substances and mixtures (Type D)

Skin corrosion/irritation (Category 2)

Serious eye damage/eye irritation (Category 2A)

Respiratory tract irritation (Category 3)

Hazardous to the aquatic environment, acute hazard (Category 3)

**GHS Label elements, including precautionary statements**

Pictograms



Signal Word

Danger

Hazard Statement(s)

H225	Highly Flammable liquid and vapour
H242	Heating may cause a fire
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H402	Harmful to aquatic life

Precautionary Statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
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P220	Keep/Store away from clothing/.../combustible materials.
P233	Keep container tightly closed.
P234	Keep only in original container.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P235	Store in a well-ventilated place. Keep cool.

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## COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms	: 4,4'-Azobis(4-cyanovaleric acid), 4,4'-Azobis(4-cyanopentanoic acid), ABCVA, ACVA
Formula	: C <sub>12</sub> H <sub>16</sub> N <sub>4</sub> O <sub>4</sub>
Molecular Weight	: 280.29 g/mol

CAS	Description	Concentration
2638-94-0	4,4'-(Diazene-1,2-diyl)bis(4-cyanopentanoic acid) (contains up to 18% water)	98%

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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.

Light sensitive.

Keep cold.

Recommended storage temperature: 2-8°C

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**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.

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**PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	white solid
Odour	no data available
Odour Threshold	no data available
Melting point/Freezing Point	118-125°C
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

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## STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

Light.

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### 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

#### Oral LD50

Rat - >2,000 mg/kg

#### Intraperitoneal LD50

Mouse - 666 mg/kg

### Skin corrosion/irritation

Causes skin irritation

### Serious eye damage/eye irritation

Causes serious eye irritation

### Respiratory or skin sensitization

no data available

### 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**

Irritating to skin, eyes, and respiratory system.

May have harmful effects if inhaled or swallowed.

**Additional Information**

RTECS: YV6190500

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

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**ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish:

Mortality LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96h

Toxicity to daphnia and other aquatic invertebrates:

Immobilization EC50 - Daphnia magna (water flea) - 31.6 mg/l - 48h

**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**

Self-reactive solid type D

4.1

UN3226 II

**IMDG**

Self-reactive solid type D

4.1

UN3226

EMS-No: F-J, S-G

Marine Pollutant: No

**IATA**

Self-reactive solid type D

4.1

UN3226

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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.

**CAS**

4,4'-(Diazene-1,2-diyl)bis(4-cyanopentanoic acid) (contains up to 18% water)

2638-94-0

**California Prop. 65 Components**

This product does not contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

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**OTHER INFORMATION**

Version : 1.2

Revision Date : 3/21/2017

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.