

# SDS

## SAFETY DATA SHEET

Oakwood Products, Inc  
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Estill, SC 29918  
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**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: (S)-2-Phenyloxirane

CAS#: [20780-54-5]

CAT#: 223292

For R&amp;D use only.

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

Flammable liquids (Category 4)  
Acute toxicity, oral (Category 5)  
Acute toxicity, dermal (Category 3)  
Skin corrosion/irritation (Category 2)  
Serious eye damage/eye irritation (Category 2A)  
Acute toxicity, inhalation (Category 3)  
Carcinogenicity (Category 1B)  
Hazardous to the aquatic environment, acute hazard (Category 2)

**GHS Label elements, including precautionary statements**

Pictograms



Signal Word

Warning

Hazard Statement(s)

H227	Combustible liquid
H303	May be harmful if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H350	May cause cancer
H401	Toxic to aquatic life

## Precautionary Statement(s)

P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.

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**COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms	: (S)-(-)-Styrene oxide, (S)-Phenylethylene oxide
Formula	: C <sub>8</sub> H <sub>8</sub> O
Molecular Weight	: 120.15 g/mol

CAS	Description	Concentration
20780-54-5	(S)-2-Phenyloxirane	94%

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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.

### **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. Avoid heating above 200°C. Avoid contact with metal ions.

### **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	clear colorless liquid
Odour	no data available
Odour Threshold	no data available
Melting point/Freezing Point	no data available
Boiling Point	192-194°C
Flash Point	79°C-closed cup
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	1.051
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	1.535

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## STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

May evolve carbon monoxide and carbon dioxide.

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## TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

Rat - 2,980 mg/kg

#### Inhalation LC50

Rat - 4 h - 4,900 mg/m<sup>3</sup>

#### Dermal LD50

Rabbit - 938 mg/kg

### Other information on acute toxicity

Target Organ Effect, Toxic by inhalation, Toxic by skin absorption, Irritant, Carcinogen

### 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

Hamster-Lungs

Sister chromatid exchange

Mouse-Cytogenetic analysis

Mouse-Sister chromatid exchange

### Carcinogenicity

May cause cancer

**Reproductive toxicity**

no data available

**STOT-single exposure**

no data available

**STOT-repeated exposure**

no data available

**Aspiration hazard**

no data available

**Exposure Routes**

Harmful to skin, eyes, and respiratory system.  
May be toxic if inhaled or swallowed.

**Target Organs**

Central nervous system, Liver

**Additional Information**

RTECS: CZ9625030

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:

LC50 - Pimephales promelas (fathead minnow) - 4.54 mg/l - 96 h

**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**

Toxic, liquids, organic, n.o.s.

6.1

UN2810 III

**IMDG**

Toxic liquid, organic, n.o.s.

6.1

UN2810 III

EMS-No: F-A, S-A

Marine Pollutant: No

**IATA**

Toxic liquid, organic, n.o.s.

6.1

UN2810 III

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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**

(S)-2-Phenyloxirane

20780-54-5

**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 : 1.3

Revision Date : 10/2/2017

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.