# **SDS**

# SAFETY DATA SHEET

Oakwood Products, Inc 730 Columbia HWY N Estill, SC 29918

www.oakwoodchemical.com

Phone Numbers:

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

### **MATERIAL IDENTIFICATION**

NAME: 2-Butene, mixture of cis and trans

CAS#: [107-01-7] CAT#: 102601 For R&D use only.

### HAZARDS IDENTIFICATION

### **GHS Classification**

Flammable gases (Category 1)
Gases under pressure (Liquefied gas)

### GHS Label elements, including precautionary statements

**Pictograms** 



Signal Word Danger

Hazard Statement(s)

H220 Extremely flammable gas

H280 Contains gas under pressure; may explode if heated

Precautionary Statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. — No

smoking.

P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381 Eliminate all ignition sources if safe to do so.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

### COMPOSITION/INFORMATION ON INGREDIENTS

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Formula : C4H8 Molecular Weight : 56.11

CAS	Description	Concentration
107-01-7	2-Butene, mixture of cis and trans	99%

### **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.

### **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.

### **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.

### **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 liquified gas
Odour no data available
Odour Threshold no data available

Melting point/Freezing Point -140°C
Boiling Point 1°C

Flash Point -33.99°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 0.59

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

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

### Incompatible materials

Strong oxidizing agents, heat, and flames and sparks.

### **Hazardous decomposition products**

May evolve carbon monoxide and carbon dioxide.

### TOXICOLOGICAL INFORMATION

# Acute toxicity Inhalation LC50

Rat - male and female - 4 h - 23 mg/l

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

Rat

lymphocyte Result: negative

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

### **Aspiration hazard**

no data available

### **Exposure Routes**

### Signs and Symptoms of Exposure

May be harmful., Acts as a simple asphyxiant by displacing air., Dizziness, Disorientation, Headache, excitement,

Central nervous system depression

### Additional Information

RTECS: EM2932000

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

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### **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

### **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.

### TRANSPORT INFORMATION

### DOT

Butylene

2.1

UN1012

### **IMDG**

Butylene

2.1

UN1012

EMS-No: F-D, S-U Marine Pollutant: No

### IATA

Butylene

2.1

UN1012

IATA Passenger: Forbidden for transport

### **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 contains a chemical on the New Jersey Right to Know Components List.

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### 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.

### **OTHER INFORMATION**

Version: 1.2

Revision Date: 10/8/2018

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.