

# 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

### MATERIAL IDENTIFICATION

NAME: **Acrolein**

CAS#: [107-02-8]

CAT#: 103433

For R&D use only.

### HAZARDS IDENTIFICATION

**GHS Classification**

Flammable liquids (Category 2)

Acute toxicity, oral (Category 2)

Acute toxicity, dermal (Category 2)

Skin corrosion/irritation (Category 1B)

Sensitisation, Skin (Category 1)

Serious eye damage/eye irritation (Category 1)

Carcinogenicity (Category 2)

Hazardous to the aquatic environment, long-term hazard (Category 1)

**GHS Label elements, including precautionary statements****Pictograms****Signal Word**

Danger

**Hazard Statement(s)**

H225	Highly Flammable liquid and vapour
H300	Fatal if swallowed
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H351	Suspected of causing cancer
H410	Very toxic to aquatic life with long lasting effects

## Precautionary Statement(s)

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304 + P340	IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.

---

**COMPOSITION/INFORMATION ON INGREDIENTS**

Formula : C<sub>3</sub>H<sub>4</sub>O  
Molecular Weight : 56.06

CAS	Description	Concentration
107-02-8	Acrolein	98%

---

**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.

Light sensitive.

Air sensitive

Moisture sensitive.

---

## EXPOSURE CONTROL/PERSONAL PROTECTION

#### Exposure Limits:

		TWA	
Component Name (CAS)	Reference	ppm	mg/m3
Acrolein (107-02-8)	OSHA	0.1	0.25

#### 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	liquid
Odour	no data available
Odour Threshold	no data available
Melting point/Freezing Point	no data available
Boiling Point	53°C
Flash Point	-29°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	0.839
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	1.403

---

## STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

Light.

Air.

Moisture.

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

### Incompatible materials

Strong oxidizing agents, strong acids, strong bases, amines, and ammonia.

### Hazardous decomposition products

May evolve carbon monoxide and carbon dioxide.

---

## TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

Rat - 26 mg/kg

#### Inhalation LC50

Rat - 4 h - 18 mg/m<sup>3</sup>

#### Dermal LD50

Rabbit - 200 mg/kg

### Skin corrosion/irritation

Rabbit - Severe irritation - 24 h

### Serious eye damage/eye irritation

Rabbit - Severe irritation - 24 h

### Respiratory or skin sensitization

May cause an allergic skin reaction

**Germ cell mutagenicity**

Human  
fibroblast  
DNA damage  
Human  
lymphocyte  
Sister chromatid exchange  
Rat  
DNA inhibition

**Carcinogenicity**

no data available

**Reproductive toxicity**

Rat - Oral  
Effects on Newborn: Growth statistics (e.g., reduced weight gain).

**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.

**Signs and Symptoms of Exposure**

Irritation eyes, skin, mucous membrane; decreased pulmonary function; delayed pulmonary edema;  
chronic resp disease

**Target Organs**

Eyes, skin, respiratory system, heart

**Additional Information**

RTECS: AS1050000

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

---

**ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish:  
LC50 - *Lepomis macrochirus* (Bluegill) - 0.08 - 0.12 mg/l - 96.0 h  
LC100 - *Leuciscus idus* (Golden orfe) - 0.3 - 4.2 mg/l - 48.0 h

Toxicity to daphnia and other aquatic invertebrates:  
EC50 - *Daphnia magna* (Water flea) - 0.04 - 0.10 mg/l - 48 h

Toxicity to algae:  
IC50 - Algae - 0.05 mg/l - 72 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

---

**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**

Acrolein, stabilized

6.1

UN1092 I

Inhalation Zone A

Reportable Quantity (RQ): 1 lbs

**IMDG**

Acrolein, stabilized

6.1

UN1092

Inhalation Zone A

EMS-No: F-E, S-D

Marine Pollutant: Yes

**IATA**

Acrolein, stabilized

6.1

UN1092

Inhalation Zone A

IATA Passenger: Forbidden for transport

IATA Cargo: Forbidden for transport

---

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

SARA 302: The following chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302:

Acrolein

**CAS**

107-02-8

**SARA 313 Components**

SARA 313: The following chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313:

Acrolein

**CAS**  
107-02-8

**New Jersey Right to Know Components**

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

Acrolein

**CAS**  
107-02-8

**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.