

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

MATERIAL IDENTIFICATION

NAME: **Methyl chloroformate**
CAS#: [79-22-1]
CAT#: 099160
For R&D use only.

HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids (Category 2)
Acute toxicity, oral (Category 4)
Acute toxicity, dermal (Category 4)
Skin corrosion/irritation (Category 1B)
Serious eye damage/eye irritation (Category 1)
Acute toxicity, inhalation (Category 1)

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

Danger

Hazard Statement(s)

H225	Highly Flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled

Precautionary Statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233	Keep container tightly closed.

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312	IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
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.
P310	Immediately call a POISON CENTER or doctor/physician.

COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms	: Chloroformic acid methyl ester
Formula	: C ₂ H ₃ ClO ₂
Molecular Weight	: 94.50 g/mol

CAS	Description	Concentration
79-22-1	Methyl chloroformate	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.

Lachrymator

Precautions for safe storage

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

Keep cold.

Recommended storage temperature 2 - 8 °C

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	Liquid
Odour	no data available
Odour Threshold	no data available
Melting point/Freezing Point	no data available
Boiling Point	70-72°C
Flash Point	10°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	1.223
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	1.387

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 bases, amines, alcohols, water, and dimethylformamide, dimethyl sulfoxide.

Hazardous decomposition products

May evolve carbon monoxide, carbon dioxide, hydrogen chloride, Carbon oxides, Hydrogen chloride gas.

TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

Rat - male and female - 313 mg/kg

Inhalation LC50

Rat - male - 4 h - 0.2 mg/l

Dermal LD50

Rabbit - 7,120 mg/kg

Skin corrosion/irritation

Rabbit - Corrosive

Serious eye damage/eye irritation

Rabbit - Risk of serious damage to eyes. - 24 - 48 h

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

Ames test

S. typhimurium

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

Harmful to skin, eyes, and respiratory system.

Toxic if swallowed.

Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Symptoms include: Burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema.

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

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

Methyl chloroformate
6.1, 3, 8
UN1238 I
Inhalation Zone A
Reportable Quantity (RQ): 1000 lbs

IMDG

Methyl chloroformate
6.1, 3, 8
UN1238
Inhalation Zone A
EMS-No: F-E, S-C
Marine Pollutant: No

IATA

Methyl chloroformate
6.1, 3, 8
UN1238
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:

	CAS
Methyl chloroformate	79-22-1

SARA 313 Components

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

	CAS
Methyl chloroformate	79-22-1

New Jersey Right to Know Components

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

	CAS
Methyl chloroformate	79-22-1

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 : 1.3

Revision Date : 11/16/2018

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.

Print Date: 12/09/2018