

➤ **Section 1 - Chemical Product**

MSDS Name: Methyl propionate 99+% (gc)

Synonym: Propanoic acid methyl ester; Methyl propylate.

➤ **Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

CAS#	Chemical Name	content	EINECS#
554-12-1	Methyl propionate	98.0	209-060-4

Hazard Symbols: F

Risk Phrases: 11

➤ **Section 3 - HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW

Highly flammable.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

Causes skin irritation.

Ingestion:

May cause digestive tract disturbances.

Inhalation:

May cause respiratory tract irritation. Vapors may cause dizziness or suffocation.

Chronic:

No information found.

➤ **Section 4 - FIRST AID MEASURES**

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower

eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

Antidote: None reported.

➔ **Section 5 - FIRE FIGHTING MEASURES**

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air.

Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Flammable liquid and vapor.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers.

Water may be ineffective. Do NOT use straight streams of water.

➔ **Section 6 - ACCIDENTAL RELEASE MEASURES**

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. A vapor suppressing foam may be used to reduce vapors.

➤ **Section 7 - HANDLING and STORAGE**

Handling:

Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous.

Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Flammables-area.

➤ **Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 554-12-1: Russia: 10 mg/m³ TWA Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are

exceeded or if irritation or other symptoms are experienced.

➤ **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Liquid

Color: colorless

Odor: none reported - fruity odor - rum-like

pH: Not available.

Vapor Pressure: 80 mbar @ 20 C

Viscosity: Not available.

Boiling Point: 78.0 - 79.0 deg C @ 760.00mm

Freezing/Melting Point: -87 deg C

Autoignition Temperature: 465 deg C (869.00 deg F)

Flash Point: 6 deg C (42.80 deg F)

Explosion Limits, lower: 2.40 vol %

Explosion Limits, upper: 13.00 vol %

Decomposition Temperature:

Solubility in water: Soluble in water.

Specific Gravity/Density: .9150g/cm3

Molecular Formula: C4H8O2

Molecular Weight: 88.11

➤ **Section 10 - STABILITY AND REACTIVITY**

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Oxidizing agents, acids, bases, heat, moisture.

Hazardous Decomposition Products:

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, acrid smoke and fumes.

Hazardous Polymerization: Has not been reported.

➔ **Section 11 - TOXICOLOGICAL INFORMATION**

RTECS#:

CAS# 554-12-1: UF5970000 LD50/LC50:

CAS# 554-12-1: Draize test, rabbit, skin: 500 mg/24H Moderate; Inhalation, mouse: LC50 = 27 gm/m³; Oral, mouse: LD50 = 3460 mg/kg; Oral, rat: LD50 = 5 gm/kg; Skin, rabbit: LD50 = >5 gm/kg.

Carcinogenicity:

Methyl propionate - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

➔ **Section 12 - ECOLOGICAL INFORMATION**

Other No information available.

➔ **Section 13 - DISPOSAL CONSIDERATIONS**

Dispose of in a manner consistent with federal, state, and local regulations.

➔ **Section 14 - TRANSPORT INFORMATION**

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F

Risk Phrases:

R 11 Highly flammable.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

S 16 Keep away from sources of ignition - No smoking.

S 23 Do not inhale gas/fumes/vapour/spray.

S 29 Do not empty into drains.

S 33 Take precautionary measures against static discharges.

WGK (Water Danger/Protection)

CAS# 554-12-1: 1

Canada

CAS# 554-12-1 is listed on Canada's DSL List.

CAS# 554-12-1 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 554-12-1 is listed on the TSCA inventory.