

## Safety Data Sheet

Date of Issue: 5.10.2021 Date of Expiry: 5.10.2026

## 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : ECP Limited

Address : PO Box 34125, Birkenhead, Auckland 0746

Telephone : +64 9 480 4386 Facsimile : +64 9 480 4385

Emergency phone number : 0800 243 622 (24 hours)

Product Name	Methyl acetate
Product Code	32408
CAS No.	79-20-9

Recommended use : Laboratory Investigations

#### 2: Hazard's identification

#### 2.1 GHS Classification

Flammable Liquids (Category B), H225
Eye irritation (Category A),H319

Specific Target Organ Toxicity (Category B), Central nervous system, H336

## 2.2 GHS Label elements, including precautionary statements



**Pictogram** 

Signal word Danger Hazard statement(s)

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

#### **Precautionary statement(s)**

#### Prevention

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

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### Response

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.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

### Storage

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

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

P405 Store locked up.

## **Disposal**

P501 Dispose of contents/ container to an approved waste disposal plant.

#### 2.3 Other hazards

Repeated exposure may cause skin dryness or cracking.

## 3: Composition/information on ingredients

#### 3.1 Substances

Formula: C3H6O2

Molecular weight: 74.08 g/mol

CAS-No.: 79-20-9 EC-No.: 201-185-2 Index-No.: 607-021-00-X

#### 4: First aid measures

#### 4.1 Description of first-aid measures

#### **General advice**

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

## In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eve contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling

## 5: Firefighting measures

### 5.1 Extinguishing media

## Suitable extinguishing media

Carbon dioxide (CO2) Foam Dry powder

## Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

## 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

#### 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system

## 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation.

## 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

#### 6.4 Reference to other sections

For disposal see section 13.

## 7: Handling and storage

## 7.1 Precautions for safe handling

#### Advice on safe handling

Avoid generation of vapours/aerosols.

#### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces, and sources of ignition. Take precautionary measures against static discharge.

#### **Hygiene measures**

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

# 7.2 Conditions for safe storage, including any incompatibilities Storage conditions

Keep container tight

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8: Exposure controls/personal protection

## 8.1 Control parameters

Ingredients with workplace control parameters

Component	CAS No.	Value	Control parameters	Basis
methyl	79-	WES-	200 ppm	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
acetate	20-9	TWA	606 mg/m3	

## 8.2 Exposure controls

## **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment

## Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

## **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

## 9: Physical and chemical properties

Appearance

Form : Liquid
Color : Colorless
Odor : fruity

Odor threshold : No data available. pH : No data available.

Melting point/freezing point : -98 °C - lit.
Initial boiling point and boiling range : 57 - 58 °C - lit)

Flash Point : -13 °C - closed cup - DIN 51755 Part 1

Evaporation rate : No data available. Flammability (solid, gas) : No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%) : 16 %(V) Flammability limit - lower (%) : 3.1 %(V)

Explosive limit - upper (%) : No data available. Explosive limit - lower (%) : No data available. Vapor pressure : 228 hPa at 20 °C : 787 hPa at 50 °C

Vapor density : 2.8

Relative density : No data available

Solubility(ies)

Solubility in water : 319 g/l at 20 °C

Partition coefficient (n-octanol/water): log Pow: 0.18 - Bioaccumulation is not expected.

Auto-ignition temperature : 454 °C at 1,013 hPa Decomposition temperature : No data available.

Viscosity : Viscosity, kinematic: No data available.

: Viscosity, dynamic:: 0.381 mPa.s at 20 °C0.364

mPa.s at 25 °C

Explosive properties : No data available Oxidizing properties : No data available

9.2 Other safety information

Surface tension 24 mN/m at 20 °C

Relative vapor density : 2.8

## 10: Stability and reactivity

## 10.1 Reactivity

Vapors may form explosive mixture with air.

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 10.3 Possibility of hazardous reactions

Exothermic reaction with:

Risk of ignition or formation of inflammable gases or vapours with:

Strong oxidizing agents

can decompose violently in contact with:

Bases acids

#### 10.4 Conditions to avoid

Warming.

## 10.5 Incompatible materials

rubber, various plastics

## 10.6 Hazardous decomposition products

In the event of fire: see section

## 11: Toxicological information

# 11.1 Information on toxicological effects

**Acute toxicity** 

LD50 Oral - Rat - male - 6,482 mg/kg

(OECD Test Guideline 401)

Symptoms: Possible damages:, Irritation symptoms in the respiratory tract. LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irritating to eyes. (OECD Test Guideline 405)

(Regulation (EC) No 1272/2008, Annex VI)

## Respiratory or skin sensitization

No data available

### Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: In vivo micronucleus test

Species: Rat

Cell type: Bone marrow Application Route: Inhalation Method: OECD Test Guideline 474

Result: negative

## Carcinogenicity

No data available

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

May cause drowsiness or dizziness. - Central nervous system Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Specific target organ toxicity - repeated exposure No data available

#### **Aspiration hazard**

No data available

## 11.2 Additional Information

RTECS: AI9100000

narcosis, This product is metabolized into formic acid. Humans and other primates metabolize formic acid more slowly than do rodents. Formic acid can build up in the body producing toxic effects possibly leading to death; therefore, data from studies in rodents may have limited relevance for human risk assessment.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption of toxic quantities:

Headache

Dizziness

Shortness of breath

Unconsciousness

narcosis

Handle in accordance with good industrial hygiene and safety practice.

## 12: Ecological information

## 12.1 Toxicity

Toxicity to fish static test LC50 - Danio rerio (zebra fish) - 250 - 350 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates: static test EC50 - Daphnia magna (Water flea) - 1,026.7 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae: static test ErC50 - Desmodesmus subspicatus (green algae) - > 120 mg/l - 72 h (OECD Test Guideline 201)

Toxicity to bacteria: static test EC50 - Pseudomonas putida - 6,000 mg/l - 16 h (DIN 38412)

## 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 70 % - Readily biodegradable. (OECD Test Guideline 301D)

#### 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not Conducted

#### 12.6 Other adverse effects

Biological effects:

When discharged properly, no impairments in the function of adapted biological wastewater treatment plants are to be expected.

Discharge into the environment must be avoided.

## 13: Disposal considerations

#### 13.1 Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers or contact us there if you have further questions.

## 14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations		
14.1	UN Number	1231	1231	1231		
14.2	UN Proper	METHYL	METHYL	Methyl acetate		
	Shipping name	ACETATE	ACETATE			
14.3	Transport	3	3	3		
	Hazard Class					
14.4	Packaging group	II	II	II		
14.5	Environmental	no	no	no		
	Hazards					
14.6	Special	None				
	precautions for					
	user					
14.7	Incompatible	rubber, various plastics				
	materials					

## 15: Regulatory information

# 15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture

National regulatory information HSNO Approval Code: HSR001188

HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits

Group Standard 2006

Tracking Required: not required Approved Handler Cert.: not required

## 16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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