

1. IDENTIFICATION

Product Name Methyl acetate

Other Names Acetic acid, methyl ester; Methyl ethanoate

Uses Solvent.

No Data Available **Chemical Family**

Chemical Formula C3H6O2 **Chemical Name** Methyl acetate **Product Description** No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation Location Telephone

Redox Ltd 2 Swettenham Road +61-2-97333000 Minto NSW 2566

Australia

Redox Ltd 11 Mayo Road +64-9-2506222

> Wiri Auckland 2104 New Zealand

3960 Paramount Boulevard Redox Inc. +1-424-675-3200

Suite 107

Lakewood CA 90712

USA

Redox Chemicals Sdn Bhd Level 2, No. 8, Jalan Sapir 33/7 +60-3-5614-2111

Seksyen 33, Shah Alam Premier Industrial Park

40400 Shah Alam Sengalor, Malaysia

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation Location Telephone Poisons Information Centre Westmead NSW 1800-251525 131126

Chemcall Australia 1800-127406 +64-4-9179888

+64-4-9179888 Chemcall Malaysia

Chemcall New Zealand 0800-243622 +64-4-9179888

National Poisons Centre New Zealand 0800-764766

CHEMTREC USA & Canada 1-800-424-9300 CN723420

+1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not Scheduled



Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Hazard Categories Flammable Liquids - Category 2

Serious Eye Damage/Irritation - Category 2A

Specific Target Organ Toxicity (Single Exposure) - Category 3

Pictograms





Signal Word Danger

Hazard Statements H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.H336 May cause drowsiness or dizziness.

AUH066 Repeated exposure may cause skin dryness or cracking

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

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

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

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.
 P261 Avoid breathing fumes/mists/vapours/spray.
 P264 Wash contacted areas 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): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep 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 if you feel unwell.
P337 + P313 If eye irritation persists: Get medical attention.

P370 + P378 In case of fire: Use carbon dioxide (CO2), dry chemical or foam for extinction.

Alcohol resistant foam is the preferred fire-fighting medium but, if it is not available,

normal foam can be used.

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 in accordance with local / regional / national /

international regulations.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods ClassificationDangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by

Road & Rail (ADG Code)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Methyl acetate	C3H6O2	79-20-9	<=100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed IF SWALLOWD: Rinse mouth with water, then give a glass of water. Do NOT induce vomiting. Call a Poison Centre or

doctor/physician for advice. Never give anything by mouth to an unconscious person.

Eye IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting

the upper and lower eyelids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If

eye irritation persists, get medical advice/attention.

Skin IF ON SKIN: Remove and isolate contaminated clothing and shoes. Immediately flush skin with running water for at least

15 minutes (Wash with plenty of soap and water). If skin irritation occurs, get medical advice/attention. Wash

contaminated clothing and shoes before reuse.

*In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if

adhering to skin.

Inhaled IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or

doctor/physician for advice. Give artificial respiration if victim is not breathing. Do NOT use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device. Administer

oxygen if breathing is difficult.

Advice to Doctor Medical supervision for at least 48 hours. Treatment of exposure should be directed at the control of symptoms and the

clinical condition of the patient. Ensure that medical personnel are aware of the material(s) involved and take precautions

to protect themselves. Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to

substance may be delayed.

Medical Conditions Aggravated by No information available.

Exposure

5. FIRE FIGHTING MEASURES

General Measures If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.

Avoid getting water inside containers.

Flammability Conditions HIGHLY FLAMMABLE LIQUID: Low flashpoint – Will be easily ignited by heat, sparks or flame.

Extinguishing MediaUse dry chemical, Carbon dioxide (CO2), alcohol-resistant foam or water spray for extinction - Do not use water jets.

Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray can be used.

*Caution: This product has a low flash point: Use of water spray when fighting fire may be inefficient.

Fire and Explosion Hazard Risk of violent reaction or explosion! Vapours will form explosive mixtures with air. Vapours may travel to source of

ignition and flash back. Most vapours are heavier than air and will collect in low or confined areas. Containers may

explode when heated. Vapours from runoff may create an explosion hazard.

Hazardous Products of

Combustion

Fire will produce irritating and/or toxic gases, including Carbon monoxide, Carbon dioxide. Under certain fire conditions,

traces of other toxic gases cannot be excluded.

Special Fire Fighting Instructions Contain runoff from fire control or dilution water - Runoff may pollute waterways.

Personal Protective Equipment Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only

provide limited protection.

Flash Point -10 °C

3.1% **Lower Explosion Limit Upper Explosion Limit** 16 %

Auto Ignition Temperature No Data Available

Hazchem Code •2YF

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources (no smoking,

flares, sparks or flame). All equipment used in handling the product must be earthed. Do not touch or walk through spilled

material. Avoid breathing mist/vapours/aerosols and contact with eyes, skin and clothing.

Clean Up Procedures Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect material and place it

in suitable containers for later disposal (see SECTION 13).

*For large liquid spills (>1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or

safe disposal.

Containment Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Dike far ahead of large spill for later

disposal. A vapour-suppressing foam may be used to reduce vapours. Water spray may reduce vapour, but may not

prevent ignition in closed spaces.

Decontamination Do NOT wash away into sewer.

Environmental Precautionary

Measures

Do not allow to enter sewers/surface or ground water. If contamination of sewers or waterways has occurred advise local

emergency services.

Evacuation Criteria Spill or leak area should be isolated immediately. Keep unauthorised/unprotected personnel away. Do not touch or walk

through spilled material.

Personal Precautionary Measures Wear protective equipment to prevent skin and eye contact and breathing in vapours (see SECTION 8).

7. HANDLING AND STORAGE

Handling Safety showers and eyewash fountains should be provided within the immediate work area. Ensure adequate ventilation -

> Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Avoid formation of aerosols. Avoid breathing mist/vapours/spray and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Ground/bond container and receiving equipment.

Take precautionary measures against static discharge.

Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers closed when not in use - check Storage

regularly for leaks. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking.

Keep away from incompatible materials (see SECTION 10). Store locked up.

Container Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

SUBSTANCE: Methyl acetate (CAS No. 79-20-9): General

- Safe Work Australia Exposure Standard: TWA = 200 ppm (606 mg/m3); STEL = 250 ppm (757 mg/m3).

- New Zealand Workplace Exposure Standard [Next review 2023]: TWA = 200 ppm (606 mg/m3); STEL = 250 ppm (757

- NIOSH REL: TWA = 200 ppm (610 mg/m3); STEL = 250 ppm (760 mg/m3). - Immediately dangerous to life or health (IDLH) concentration: 3,100 ppm.

Exposure Limits No Data Available

Biological Limits No information available.

Engineering Measures Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit

requirements/guidelines. Use explosion-proof electrical/ventilation/lighting equipment.

*Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Personal Protection Equipment

- Respiratory protection: Wear respiratory protection in case of inadequate ventilation, or if engineering controls do not maintain airborne concentrations below recommended exposure limits, or to an acceptable level. Recommended: Short term filter device A/P2 (refer to AS/NZS 1715 & 1716).
- Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Safety glasses with side shields.
- Hand protection: Wear protective gloves (impermeable and resistant to the product/substance/preparation). Recommended glove material: Butyl rubber, BR (Thickness: >=0.7 mm; Break through time: >240 min).
- Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Flame retardant anti-static protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Special Hazards Precaustions

No information available.

Work Hygienic Practices

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Be sure to clean skin thoroughly after work and before breaks.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical StateLiquidAppearanceLiquidOdourFruityColourColourless

pH No Data Available
Vapour Pressure 220 (@ 20 °C)
Relative Vapour Density No Data Available

 $\begin{array}{lll} \textbf{Boiling Point} & 57\,^{\circ}\text{C} \\ \textbf{Melting Point} & -98.05\,^{\circ}\text{C} \\ \textbf{Freezing Point} & -98.05\,^{\circ}\text{C} \\ \end{array}$

Solubility 330 g/l water 20°C Specific Gravity No Data Available

Flash Point -10 °C

Auto Ignition Temp No Data Available **Evaporation Rate** No Data Available **Bulk Density** 0.93 kg/m3 (20 °C) **Corrosion Rate** No Data Available **Decomposition Temperature** No Data Available Density 0.93 g/cm3 Specific Heat No Data Available **Molecular Weight** No Data Available **Net Propellant Weight** No Data Available **Octanol Water Coefficient** No Data Available **Particle Size** No Data Available **Partition Coefficient** No Data Available **Saturated Vapour Concentration** No Data Available Vapour Temperature No Data Available No Data Available Viscosity

VOC Volume 100 %

No Data Available

Volatile Percent

Additional Characteristics Organic solvents: 99%

Potential for Dust Explosion

Not applicable.

Characteristics

Fire

No information available.

Flame Propagation or Burning Rate of Solid Materials

Fast or Intensely Burning

No information available.

Non-Flammables That Could Contribute Unusual Hazards to a

Properties That May Initiate or

No information available.

Contribute to Fire Intensity

HIGHLY FLAMMABLE LIQUID - Low flashpoint - Will be easily ignited by heat, sparks or flame.

Reactions That Release Gases or **Vapours**

Fire/decomposition will produce irritating and/or toxic gases, including Carbon monoxide, Carbon dioxide. Under certain

fire conditions, traces of other toxic gases cannot be excluded.

Release of Invisible Flammable Vapours and Gases

Flammable vapours can be released at elevated temperatures. Vapours will form explosive mixtures with air.

10. STABILITY AND REACTIVITY

General Information When properly handled and stored, no dangerous reaction is known.

Chemical Stability This product is stable under prescribed use and storage.

Conditions to Avoid Keep away from heat and ignition sources. Take precautionary measures against static discharge.

Materials to Avoid Incompatible/reactive with strong oxidising agents, alkalis, acids.

Hazardous Decomposition

Products

Fire/decomposition will produce irritating and/or toxic gases, including Carbon monoxide, Carbon dioxide. Under certain fire conditions, traces of other toxic gases cannot be excluded. Under certain fire conditions, traces of other toxic gases cannot be excluded. Decomposition products depend upon temperature, air supply and the presence of other materials.

Hazardous Polymerisation Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information

- Acute toxicity: Not classified based on available data. Ingestion may cause Abdominal pain, Nausea, Vomiting,
- Skin corrosion/irritation: Not classified based on available data (Rabbit: Not irritating) [OECD Test Guideline 404]. Symptoms of exposure: Dry skin, Redness, Roughness and chapped skin.
- Eye damage/irritation: Causes serious eye irritation (Rabbit: Irritating to the eye) [OECD 405]. Symptoms of exposure: Redness, Pain, Blurred vision, Risk of corneal clouding.
- Respiratory/skin sensitisation: Not classified based on available data.
- Germ cell mutagenicity: Not classified based on available data.
- Carcinogenicity: Not classified based on available data.
- Reproductive toxicity: Not classified based on available data.
- STOT (single exposure): May cause drowsiness or dizziness. High concentration may cause central nervous system depression resulting in headaches, dizziness, and nausea. Symptoms of exposure: Cough, Drowsiness, Dullness, Headache, Laboured breathing, Sore throat, Unconsciousness (Symptoms may be delayed).
- STOT (repeated exposure): Not classified based on available data.
- Aspiration toxicity: Not classified based on available data.

Acute

Ingestion Acute toxicity (Oral):

- LD50, Rabbit: 6,482 mg/kg [Supplier's SDS].

Other Acute toxicity (Dermal):

- LD50, Rat: >2,000 mg/kg [Supplier's SDS].

Inhalation Acute toxicity (Inhalative):

- LC50, Rat: >49.2 mg/l (4 h) [Supplier's SDS].

Carcinogen Category

None

12. ECOLOGICAL INFORMATION

Ecotoxicity Aquatic toxicity: Not classified based on available data.

EC50, Crustacea (Daphnia magna): 1,027 mg/l (48 h) [OECD 202].
EC50, Algae (Desmodesmus subspicatus): 120 mg/l (72 h)
EC50, Fish (Danio rerio): 250 - 350 mg/l (96 h) [OECD 203].
Easily biodegradable (Degradation: >68%, 28 d) [OECD 301 D].

Persistence/Degradability Easily biodegradable (Degradation: >68%, 28 d) [OECD 301 Mobility Potential for mobility in soil is very high (Koc between 0 and

Potential for mobility in soil is very high (Koc between 0 and 50).
- Partition coefficient, Soil, Organic carbon/water (Koc): 13
- Henry's Law Constant (H): 6.43 Pa m3/mol @ 20 °C

Environmental Fate Slightly hazardous for water - Do not allow undiluted product or large quantities of it to reach ground water, water course

or sewage system.

Bioaccumulation Potential Bioaccumulation is unlikely. Bioconcentration potential is low (BCF: <100 or LogPow: <3).

Environmental Impact No Data Available

13. DISPOSAL CONSIDERATIONS

General Information Recover or recycle, if possible. Dispose of contents/container in accordance with local/regional/national regulations.

Normally suitable for incineration by an approved agent.

*Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Special Precautions for Land Fill Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Empty containers

may still contain hazardous residue.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping NameMETHYL ACETATEClass3 Flammable LiquidsSubsidiary Risk(s)No Data Available

EPG 18 Liquids - Highly Flammable, Toxic And/Or Corrosive

UN Number 1231
Hazchem •2YE
Pack Group ||

Special Provision No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping NameMETHYL ACETATEClass3 Flammable LiquidsSubsidiary Risk(s)No Data Available

EPG 18 Liquids - Highly Flammable, Toxic And/Or Corrosive

UN Number 1231
Hazchem •2YE
Pack Group ||

Special Provision No Data Available

Land Transport (New Zealand)

NZS5433

 Proper Shipping Name
 METHYL ACETATE

 Class
 3 Flammable Liquids

 Subsidiary Risk(s)
 No Data Available

EPG 18 Liquids - Highly Flammable, Toxic And/Or Corrosive

 UN Number
 1231

 Hazchem
 2YE

 Pack Group
 II

Special Provision No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping NameMETHYL ACETATEClass3 Flammable LiquidsSubsidiary Risk(s)No Data Available

ERG 129 Flammable Liquids (Polar / Water-Miscible / Noxious)

 UN Number
 1231

 Hazchem
 2YE

 Pack Group
 II

Special Provision No Data Available

Sea Transport

IMDG Code

Proper Shipping NameMETHYL ACETATEClass3 Flammable LiquidsSubsidiary Risk(s)No Data Available

 UN Number
 1231

 Hazchem
 2YE

 Pack Group
 II

Special Provision No Data Available

EMS F-E, S-D Marine Pollutant No

Air Transport

IATA DGR

Proper Shipping NameMETHYL ACETATEClass3 Flammable LiquidsSubsidiary Risk(s)No Data Available

 UN Number
 1231

 Hazchem
 2YE

 Pack Group
 II

Special Provision No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods ClassificationDangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by

Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information Methyl acetate is listed in Appendix B, Part 3 of the SUSMP: Substances considered not to require control by scheduling

(Low toxicity; Solvent).

Poisons Schedule (Aust) Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR001188 (Reissued)

National/Regional Inventories

Australia (AIIC) Listed

Canada (DSL) Listed

Canada (NDSL) Not Determined

China (IECSC) Listed

Europe (EINECS) Listed

Europe (REACh) Not Determined

Japan (ENCS/METI) Listed

Korea (KECI) Listed

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Listed

Switzerland (Giftliste 1) Not Determined

Switzerland (Inventory of Notified

Substances)

Not Determined

Taiwan (NCSR) Listed

USA (TSCA) Listed

16. OTHER INFORMATION

Related Product Codes MEACET1000, MEACET1001, MEACET2000, MEACET2010, MEACET2010, MEACET2100, MEACET2100, MEACET2101, MEACET2100, MEACET2101, MEACET21

MEACET2105, MEACET2200, MEACET2205, MEACET2206, MEACET3000, MEACET3001, MEACET3002, MEACET3010, MEACET3020, MEACET4000, MEACET5000, MEACET5005, MEACET5006, MEACET5007, MEACET5008, MEACET5009,

MEACET5018, MEACET5019

Revision 5

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 Carbon Dioxide

COD Chemical Oxygen Demand deg C (°C) Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/I Grams per Litre

HSNO Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health **immiscible** Liquids are insoluable in each other.

inHg Inch of Mercury
inH20 Inch of Water

K Kelvin **kg** Kilogram

kg/m³ Kilograms per Cubic Metre

Ib Pound

LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

Itr or L Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH20 Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Heath and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

 ${\bf R}$ Rankine

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

tne Tonne TWA Time Weighted Average ug/24H Micrograms per 24 Hours UN United Nations wt Weight