

# SAFETY DATA SHEET



## Section 1: Identification of the Substance/Mixture and of the Supplier

<b>Product Name:</b>	Methyl Ethyl Ketone
<b>Proper Shipping Name</b>	Methyl Ethyl Ketone
<b>Recommended use:</b>	Cleaner & degreaser; raw material for manufacture of adhesives, surface coatings and other products.
<b>Restriction of use:</b>	Refer to Section 15.
<b>Company Details</b>	Marketing Chemicals Ltd
<b>Address:</b>	7 Rymer Place, Mangere Bridge Auckland. New Zealand
<b>Telephone:</b>	+64 9 634 3862 [8.00 am to 4.30pm – Monday to Friday]
<b>Fax:</b>	+64 9 634 3864
<b>Emergency Telephone:</b>	+64 274 340990(24 hours) National Poison Centre(24 hours): 0800 POISON [ 764 766]
<b>Date of preparation</b>	3 September 2024 v2

## Section 2: Hazard Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

**EPA Approval No:** HSR001190

**Pictograms:**



**EPA Approval Number:**

**Signal Word: DANGER**

**GHS Category**

Flammable Liquids Cat. 2

Eye irritation Cat. 2

Specific target organ toxicity –  
repeated exposure Cat. 2

**Hazard Code**

H225

H319

H373

**Hazard Statement**

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause damage to organs through  
prolonged or repeated exposure.

**Prevention Code**

P102

P103

P210

**Prevention Statement**

Keep out of reach of children.

Read label before use.

Keep away from heat, sparks, open flames and hot surfaces. No smoking.

P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating, and lighting.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective clothing.

<b>Response code</b>	<b>Response Statement</b>
P101	If medical advice is needed, have product container or label at hand.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use dry chemical powder, carbon dioxide, or alcohol foam for extinction.

<b>Storage Code</b>	<b>Storage Statement</b>
P403 + P235	Store in a well-ventilated place. Keep cool.

### Section 3: Composition/Information on Ingredients

<b>Name</b>	<b>% by Wt.</b>	<b>CAS Number</b>
Methyl Ethyl Ketone	100	78-93-3

### Section 4: First Aid Measures

<b>Eyes:</b>	Immediately flush eyes with plenty of water for 15 minutes. If irritation persists, seek medical attention.
<b>Skin:</b>	Wash exposed area with mild soap and water. Get medical attention if irritation develops or persists.
<b>Ingestion:</b>	Do not Induce Vomiting. Get immediate medical attention.
<b>Inhalation:</b>	Remove victim from area of exposure. If unconscious, give oxygen. Give artificial respiration if not breathing. Get immediate medical attention.

**NOTES TO PHYSICIAN:** Exposure to high concentrations of this material (e.g., in enclosed spaces or with deliberate abuse) may be associated with cardiac arrhythmias. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

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

Symptoms:

<b>Ingestion</b>	Not applicable
<b>Inhalation</b>	Not applicable
<b>Skin</b>	Not applicable

<b>Eyes</b>	Causes serious eye irritation.
<b>Chronic</b>	May cause damage to organs through prolonged or repeated exposure.

For Further Information Telephone (24 Hours) The National Poison Centre: 0800 Poison [764 766]

## Section 5: Fire Fighting Measures

<b>Hazard Type</b>	Flammable.
<b>Hazards from products</b>	Vapour accumulations may flash and/or explode if ignited. Keep ignition sources, open flames, etc. away from those fumes.
<b>Suitable Extinguishing media</b>	Dry chemical, alcohol foam, or carbon dioxide.
<b>Precautions for firefighters and special protective clothing</b>	Proper respiratory equipment to protect against the hazardous effects of combustion products is recommended. Water in a straight hose stream may cause fire to spread and should be used as a cooling medium only.
<b>HAZCHEM CODE</b>	2YE

## Section 6: Accidental Release Measures

### Minor spills:

Remove or eliminate all ignition sources. Clean up spills immediately. Avoid breathing vapours and contact with skin and eyes. Wear personal protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Collect residues and waste material in a labelled container suitable for flammables. Seal container and dispose of safely.

### Major spills:

Clear area of personnel and move upwind. Alert Fire Bridge (111); advice location and nature of hazard. Wear breathing apparatus plus protective gloves. Stop leak if safe to do so. Contain spill with sand, earth, or vermiculite. Eliminate sources of ignition, naked lights. No smoking. Increase ventilation. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth, or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent run off into drains. If contamination of drains or waterways occurs, advise Emergency Services and Local or Regional authority.

## Section 7: Handling And Storage

### Handling

Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel or container to another. This material can accumulate static charge by flow or agitation. Vapours can be ignited by static discharge. Use explosion proof equipment as directed by local fire codes. Keep out of reach of children. Read label before use. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe fumes, vapours or spray. Wash hands thoroughly after handling. Wear protective clothing.

### Storage:

Store unopened containers under cool, dry and ventilated conditions. Keep away from heat, sparks and flame. Store away from incompatible materials listed in Section 10.

## Section 8: Exposure Controls/Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Methyl ethyl ketone (bio) [78-93-3]	150	445	300	890

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2023 14TH EDITION.

### Personal Protection Equipment



- Engineering Controls:** General (mechanical) room ventilation is considered satisfactory in enclosed spaces. Where explosive mixtures may be present, electrical systems safe for such locations must be used.
- Eye / Face Protection:** Wear safety glasses with side shields or goggles when handling this material.
- Body Protection:** PVC-coated gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn.
- Respiratory Protection:** Use NIOSH/MSHA approved respirators.

## Section 9: Physical And Chemical Properties

<b>Appearance</b>	Liquid
<b>Colour</b>	Water White
<b>Odour</b>	Characteristic Solvent Odour
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not applicable
<b>Boiling Point</b>	79.6°C
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	-4°C
<b>Flammability</b>	Flammable
<b>Upper and Lower Explosive Limits</b>	1.8% to 11.5%
<b>Vapour Pressure</b>	9.5kPa @ 20°C)
<b>Vapour Density</b>	2.4 kPa @20°C
<b>Specific Gravity</b>	0.804 – 0.806@ 20°C
<b>Solubility in Water</b>	Miscible
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	404°C
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not applicable

## Section 10: Stability And Reactivity

<b>Stability of the Substance:</b>	Stable
<b>Conditions to avoid:</b>	Exposure to excessive heat, open flames and sparks. Avoid conditions that favour the formation of excessive mists and/or fumes.
<b>Materials to avoid:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products:</b>	None known
<b>Conditions Contributing to Hazardous Polymerization</b>	Will not occur

## Section 11: Toxicological Information

<b>Eyes:</b>	SPECIES: Rabbit; RESULT: Highly irritating
<b>Skin:</b>	SPECIES: Rabbit ;RESULT: Moderate
<b>Ingestion:</b>	SPECIES: Rat; ENDPOINT: LD50; VALUE: 2737 mg/kg
<b>Inhalation:</b>	Exposure to 590 mg/m <sup>3</sup> (200 ppm) had no significant effect in a variety of behavioural and psychological tests. Short-term exposure to MEK alone does not appear to be a significant hazard, either occupationally or for the public. Experimental exposure to a concentration of 794 mg/m <sup>3</sup> (270 ppm) for 4 h/day had little or no effect on behaviour, and a 5-min contact with liquid MEK produced no more than a temporary whitening of the skin. There is only one non-occupational report of acute toxicity to MEK. This resulted from accidental ingestion and appeared to produce no lasting harm. There is no evidence that occupational MEK exposure has resulted in death. There have been two reports of chronic occupational poisoning and one questionable report of acute occupational poisoning. In one of the chronic cases, exposure to 880-1770 mg/m <sup>3</sup> (300-600 ppm) resulted in dermatoses, numbness of fingers and arms, and various symptoms such as headache, dizziness, gastrointestinal upset, and loss of appetite and weight. This paucity of incidents of reputed poisoning by MEK alone reflects both the low toxicity of MEK and the fact that it is most commonly used not on its own but as a component of solvent mixtures.

<b>Chronic effects</b>	
<b>Carcinogenicity</b>	Not applicable
<b>Reproductive Toxicity</b>	Not applicable
<b>Germ Cell Mutagenicity</b>	Not applicable
<b>Aspiration</b>	Not applicable
<b>STOT/SE</b>	Not applicable
<b>STOT/RE</b>	May cause damage to organs through prolonged or repeated exposure.

## Section 12: Ecological Information

This product is not hazardous to the environment.

<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

## Section 13: Disposal Considerations

Care should be taken to ensure compliance with national, regional and local authority regulations. Packaging may still contain fumes and vapours that are flammable. Ensure that empty packaging is allowed to dry. Product can be offered for recycling, recovery or disposal through a suitably qualified or licensed contractor. Suitable for disposal by incineration.

## Section 14: Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021



### Road, Rail, Sea and Air Transport

UN No	1193
Class - Primary	3
Packing Group	II
Proper Shipping Name	METHYL ETHYL KETONE
Marine Pollutant	No
Special Provisions	If the product's individual container is below 1L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

## Section 15: Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR001190

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	100L (>5L); 250L (<5L); 50L (open)
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250L
Emergency Response Plan	1000 L
Secondary Containment	1000 L
Restriction of Use	None

## Section 16: Other Information

### Glossary

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.

EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2023 14<sup>th</sup> edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

Marketing Chemicals Ltd has taken care in compiling this information. No liability is accepted directly or indirectly from its application as conditions of use are outside the Company's control. End users are obliged to conform to relevant Local Government regulations.

For General Information : Marketing Chemicals Ltd,

Phone: +64 (09) 634 3862 / +64 (0)27 4340990

Fax : +64 (09) 634 3864

Issue Date: 3 September 2024      Review Date: 3 September 2029

End of Safety Data Sheet.