



## Safety Data Sheet Methyl Ethyl Ketone

Updated March 2021

### 1. Identification of the Material and Supplier

Product Name: Methyl Ethyl Ketone  
 Product Code: MEK  
 UN Number: 1193  
 DG Class: 3  
 Shipping Name: Methyl Ethyl Ketone  
 Packaging Group: II  
 Hazchem Code: 2YE  
 Uses: Use as a solvent only in Industrial/Professional processes  
 Company: H S Composites  
 Address: 63 Hunua Road, Papakura, Auckland 2110  
 Telephone: +64 (09) 295 2200  
 Email: sales@hscomposites.co.nz  
 Website: www.hscomposites.co.nz

### 2. Hazard Identification

Regulatory Information Substances: Classified as Hazardous according to the Hazardous Regulation 2001, New Zealand & Group Standard 2017

HSNO Approval Number: HSR001190

Dangerous Goods Class: 3

#### Hazardous Classifications

Highly Flammable Liquid	Category 2
Acutely Toxic (Oral)	Category 5
Mild Skin Corrosion/Irritant	Category 1C
Serious Eye Damage/Eye Irritation	Category 2 (2A/2B)
Specific Target Organ Toxicity (repeated exposure)	Category 2

Pictograms:Signal Word: **Warning**

H226	Flammable liquid and vapor.
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HEALTH HAZARDS:

H226	Flammable Liquid and Vapour
H303	Harmful if Swallowed
H316	Causes Skin Irritation
H319	Causes eye irritation
H332	Harmful if inhaled
H373	May cause damage to organs through prolonged or repeated exposure

ENVIRONMENT HAZARDS:

	Non-hazardous to the environment
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PRECAUTIONARY STATEMENTS: Preventions

P102	Keep out of reach of Children
P103	Read Label/SDS before use
P201	Obtain instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flame/hot surfaces. No smoking.
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion proof equipment
H242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe vapours
P261	Do not breath dust/fumes/gas/mist/vapours/spray
P264	Wash hands and exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only in well-ventilated areas
P273	Avoid release into the environment
P280	Wear protective clothing, gloves and eye protection
P281	Use personal protective equipment as required

**RESPONSE:**

P101	If medical advice is needed, have product container or label at hand
P301 + P312	If swallowed call POISON CENTRE or DOCTOR if you feel unwell
P330	Rinse out mouth, do not swallow
P303 + P353	If on skin or hair, wash with plenty of soap and water
P332 + P313	If skin irritation occurs, get medical advice
P361	Take off contaminated clothing and wash before reuse
P304 + P340	If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing
P305 + P351	If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so, continue to rinse
P337 + P313	If eye irritation persists seek medical advice
P308 + P313	If exposed or concerned seek medical advice
P314	Get medical advice if you feel unwell
P370 + P378	In case of fire use water fog, foam, dry chemical or carbon dioxide (CO <sub>2</sub> ) to extinguish. DO NOT USE water jet (this will only spread the fire)
P391	Collect any spillage
P301+P330	IF SWALLOWED: Rinse out mouth, do not swallow water, DO NOT induce vomiting.

**STORAGE:**

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P235	Keep cool.
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P405	Store in a locked area

**DISPOSAL:**

P501	Dispose of product and packaging in accordance with local and Governmental regulations or through an approved waste disposal plant.
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<b>Dangerous Goods Classification</b>	3
<b>Packing Group</b>	II
<b>Hazchem Code</b>	2YE

## 3. Composition / Information on Ingredients

Component	Cas No	Proportion
Methyl Ethyl Ketone	78-93-3	100%

## 4. First Aid

**For advice, contact the National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor, show Doctor in attendance a copy of this SDS.**

Inhalation: Move the person to fresh air immediately. Keep warm and at rest until recovered. Get medical advice if person feels unwell or is concerned.

Begin artificial respiration if breathing has stopped and get immediate medical assistance.

Swallowed: If swallowed, DO NOT induce vomiting. Rinse mouth. Get medical advice. Begin artificial respiration if the victim is not breathing. Use mouth to nose rather than mouth to mouth. Obtain immediate medical attention

Skin Contact: If skin contact occurs, remove contaminated clothing and wash skin with soap and water. If skin irritation occurs, get medical advice. Launder contaminated clothing before re-use.

Eye Contact: Hold eyelids apart and flush the eye continuously with running water for 15 minutes. Remove contact lenses after 5 minutes if present, and easy to do. Continue flushing. Get immediate medical attention if irritation persists.

First Aid facilities: Provide eye baths and safety showers close to areas where splashing may occur.

Note to Doctor/Physician: Treat symptomatically. Show Dr this notice.

## 5. Fire Fighting Measures

Flammable liquids and vapours: Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing fire fighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media: Water mist or fog, carbon dioxide (CO<sub>2</sub>), foam or dry chemical.

DO NOT use Jetstream of water.

Hazards from combustion products: Smoke, fume, carbon dioxide and carbon monoxide and incomplete combustion products.

Precautions for fire fighters and special protective equipment: Full protective clothing and self-contained breathing apparatus.

Hazchem Code: **2YE**

Highly Flammable liquid and vapour. Vapour/Air mixture may ignite explosively. Flash back along vapour trail may occur. Run off into drains or sewer may create a fire or explosion hazard.

### SPECIAL FIREFIGHTING PROCEDURES.

Wear full protective clothing and self-contained breathing apparatus in positive pressure mode, in case of fire the product may be violently or explosively reactive. Use water spray to disperse the vapours. Prevent product and vapours from entering drains/sewers/water courses.

## 6. Accidental Release Measures

Steps to be taken if the material is released or spilled.

Evacuate personnel to a safe area. Use Protective equipment as required. Ensure adequate ventilation in area. Make sure there is no risk to self or personnel.

Turn off leak if safe to do so.

Eliminate all sources of ignition (flames, hot surfaces, electrical, static or frictional sparks, no smoking). Then ventilate the area.

Contain the area of spillage and place material into container for use or disposal. Absorb remainder on sand or perlite and place the saturated absorbent into closed containers and label for disposal.

Prevent contamination of storm-water drains and waterways.

Waste disposal method. Destroy by liquid incineration with off-gas scrubber.

Contaminated absorbent to be disposed of in accordance with appropriate local or governmental regulations.

Correctly label all material containers to be disposed of.

## 7. Storage and Handling

Use Personal Protection. Avoid inhalation of vapour and contact with skin, eyes and clothing. Launder contaminated clothing before re-use, wash skin with soapy water. Wash hands thoroughly before eating.

This product is highly flammable, do not open near open flame, sources of heat or ignition, NO SMOKING.

Store in a locked and bunded area or approved flammable goods store away from direct heat (ideally below 25°C to prevent spoilage). Keep containers tightly closed when not in use. Open drums slowly in case of internal pressure. Isolate from all potential sources of ignition including flames and electrical sparks.

Hazardous polymerisation can take place when not stored correctly or close to a fire.

Store separate from oxidising materials, peroxides and metal salts.

Ground (earth) containers when using above flash point, -4°C.

## 8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Limits: Worksafe Standards, November 2020

Methyl Ethyl Ketone (Cas# 78-93-3) is 150ppm TWA and 300ppm STEL

General Use: This product is hazardous and should be used with a local exhaust ventilation to maintain vapour/dust concentration below WES level. If concentrations exceed exposure limit use organic vapour canister mask or approved air-line mask to maintain workshop limits.

Skin Protection: Wear overalls or other work clothing providing arm and leg cover. Use protective gloves (Butyl rubber). Use antistatic footwear.

Eye Protection: Safety goggles or splash mask.

Environmental Control: Prevent from entering into sewer, stormwater or waterways.



**9. Physical / Chemical Properties**

<b>Physical Description &amp; colour:</b>	Clear liquid.
<b>Odour:</b>	Pungent aromatic odour.
<b>Boiling Point:</b>	80°C
<b>Flammable Liquid Flash Point:</b>	-4°C
<b>Flammable Limits:</b>	LEL (lower explosive limit) 1.8% UEL (upper explosive limit) 11.5%
<b>Relative Density:</b>	0.81
<b>Vapour Density:</b>	3.6
<b>Percent Volatiles:</b>	100%
<b>Water Solubility:</b>	Mixes with water

**10. Stability and Reactivity**

<b>Stability:</b>	Stable under normal storage and handling conditions.
<b>Conditions to avoid:</b>	Exposure to sunlight, open flames and other sources of ignition.
<b>Materials to avoid:</b>	Strong oxidising agents.  Thermal decomposition may result in the right conditions, release of toxic and/or irritating fumes carbon monoxide, carbon dioxide and various organic
<b>Hazardous Polymerisation:</b>	Will not occur.

**11. Toxicological Information**

When used under properly controlled conditions, within workplace exposure limits and with adequate ventilation and protective equipment, no adverse health effects are to be expected.

**Acute effects of over exposure.**

**If Swallowed:** Harmful by ingestion and may cause irritation to the mouth, throat, oesophagus with symptoms of nausea, vomiting and gastric disturbance.

**Eye Contact:** Moderate to serious irritation. Tearing, stinging, blurred vision and redness will occur if.

**Skin Contact:** This product cause moderate skin irritation, redness, itching and swelling. Repeated exposure may result in defatting of the skin causing cracking or even dermatitis.

**Inhalation of Vapour:** May cause headaches, nausea, irritation to the nose, throat and respiratory system. Severe inhalation may result in unconsciousness or even death.

**Chronic effects of overexposure:**

Mild dermatitis may result from prolonged or repeated skin contact. Seek medical advice.

Excessive exposure to the liquid material or vapour may affect the central nervous system, the liver, kidneys and respiratory system.

Suspected of causing damage to the unborn child.

May cause damage to organs through prolonged exposure.

## 12. Ecological Data

Prevent the product from entering storm-water drains, sewers or waterways.  
 Has low toxicity to Aquatic life and harmful to the soil, may contaminate ground water if reached.  
 Will readily biodegrade over a short time by evaporation. Dissolves in water.

## 13. Disposal Considerations

P501

Dispose of product and packaging in accordance with local and Governmental regulations or through an approved waste disposal plant.

Empty containers may contain flammable residues/vapours, keep away from sources of ignition.

<b>Dangerous Goods Classification</b>	3
<b>Packing Group</b>	II
<b>Hazchem Code</b>	2YE

## 14. Transport Information

UN Number:	UN1193
Proper Shipping Name:	Methyl Ethyl Ketone
Hazchem Code:	2YE
Dangerous Goods Class:	Class 3
Packing Group:	II
Tunnel Restriction:	D
Marine Pollutant:	No
Special Precautions for users:	223
EMS Number	F-E, S-D
IERG Code	127

DO NOT LOAD WITH – Explosives, toxic gases, spontaneously combustible substances, oxidisers or organic peroxides.

## 15. Regulatory Information

EPA New Zealand HSNO approval code HSR001190, Additives, Process Chemicals and Raw Materials (Flammables) Group standard 2020.

SDS To be available within 10 minutes when required.

## 16. Other Information

This SDS contains only safety-related information. For other data see product information literature.

Group Standard	October 2020
LEL	Lower explosive limit
UEL	Upper explosive limit
TWA	Time weighted average over 8 hr working day
STEL	Short term expose limit
Cas #	Unique registered number for chemicals
ppm	parts per million
UN number	Individual number assigned to hazardous materials
EMS	Emergency response for shipping
ERG	Emergency code for first responders
Other References	Supplier SDS's

**Review:** March 2021

Reason: Update and pictograms

**Disclaimer:** The information given in this safety data sheet is given in good faith and is believed to be valid and accurate at the time of publication. However, no responsibility is accepted for accident or injury which may occur from omissions or from information contained in the data sheet.

HS Composites 03/21