SAFETY DATA SHEET

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

Product Name:	Methyl Ethyl Ketone
Proper Shipping Name	Methyl Ethyl Ketone
Recommended use:	Cleaner & degreaser; raw material for manufacture of adhesives, surface coatings and other products.
Company Details	Glue Guru Limited
Address:	18 Kaimahi Road, Wairau Valley
	Auckland. New Zealand
Telephone:	+64 9 444-4878 [8.00 am to 4.30pm – Monday to Friday]
Fax:	+64 9 442-5975
Emergency Telephone:	+64 274 736008(24 hours)
	National Poison Centre(24 hours): 0800 POISON [764 766]
Date of preparation	16 June 2015

Section 2: Hazard Identification



DANGER:

- Highly Flammable liquid and vapour.
- Harmful if swallowed.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause damage to organs through prolonged or repeated exposure.

Group Standard: Methyl Ethyl Ketone **HSNO Approval Number**: Group Standard HSR001190 **HSNO Classes:** 3.1B, 6.1E(oral), 6.3B, 6.4A, 6.9B(inhalation)

Prevention Statements:

- Keep out of reach of children.
- Read label before use.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge
- Wear protective gloves and eye/face protection.
- Wash hands thoroughly after handling.
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Response Statements

• IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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- In case of fire: Use Dry Chemicals, Carbon Dioxide or Foam for extinction.
- If medical advice is needed, have product container or label at hand.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth.
- If skin irritation occurs: Get medical advice/ attention.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- Get medical advice/attention if you feel unwell.

Storage Statements

• Store in a well-ventilated place. Keep cool.

Section 3: Composition/Information on Ingredients

Name	% by Wt.	CAS Number
Methyl Ethyl Ketone	100	78-93-3

Section 4: First Aid Measures

Eyes:	Immediately flush eyes with plenty of water for 15 minutes. If irritation persists, seek medical attention.
Skin:	Wash exposed area with mild soap and water. Get medical attention if irritation develops or persists.
Ingestion:	Do not Induce Vomiting. Get immediate medical attention.
Inhalation:	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.

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

Section 5: Fire Fighting Measures

Flash Point:	-4°C degrees
Auto ignition Temperature:	404°C
Flammable Limits in Air % by Volume:	1.8 - 11.5
Hazchem code	2[Y]E
Extinguishing Media:	Dry chemical, alcohol foam, or carbon dioxide.
Fire Fighting Instructions:	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.

Unusual Fire and Explosion Hazards:

In event of fire:

Vapour accumulations may flash and/or explode if ignited. Keep ignition sources, open flames, etc. away from those fumes.

Alert Fire Bridge (111); advice location and nature of hazard. Wear breathing apparatus and protective gloves. Shut off product that may "fuel" a fire if safe to do so. If safe, switch off electrical equipment until vapour hazard removed. Allow trained personnel to attend a fire in progress, providing fire fighters with this Safety Data Sheet. Prevent product and extinguishing media from escaping to drains and waterways.

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 quantifies 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 contains 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.
Storage:	Store unopened containers under cool, dry and ventilated conditions. Keep away from heat, sparks and flame.
Section 8: Exposure	e Controls/Personal Protection
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.
Exposure Limits:	WES-TWA = 150ppm(445 mg/m ³); WES-STEL = 300ppm
Section 9: Physical	And Chemical Properties
Appearance	Water White Liquid
Odour	Characteristic Solvent Odour
Specific Gravity	$0.804 - 0.806 @20^{\circ}C$

Vapour Pressure	9.5 kPa @20 ^o C
Vapour Density	2.4 kPa @20 ⁰ C
Solubility in water	Miscible
Boiling point	79.6 ⁰ C
Evaporation Rate	Not available
Flash Point	-9º C

Section 10: Stability And Reactivity

Stability of the Substance:	Stable
Conditions to avoid:	Exposure to excessive heat, open flames and sparks. Avoid conditions that favour the formation of excessive mists and/or fumes.
Materials to avoid:	Strong oxidizing agents.
Hazardous Decomposition Products:	
Conditions Contributing to Hazardous Polymerization	Will not occur

Section 11: Toxicological Information

Eyes:	SPECIES: Rabbit; RESULT: Highly irritating
Skin:	SPECIES: Rabbit :RESULT: Moderate
Ingestion:	SPECIES: Rat; ENDPOINT: LD50; VALUE: 2737 mg/kg
Inhalation:	Exposure to 590 mg/m3 (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/m3 (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 to 880-1770 mg/m3 (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

Section 12: Ecological Information

No data available

Section 13: Disposal Considerations

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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



UN No:	1193
Proper Shipping Name:	Methyl Ethyl Ketone
Dangerous Goods Class:	3
Subsidiary risk	
Packing Group:	II
Hazchem Code:	2(Y)E
Section 15: Regu	latory Information
HSNO Approval No:	HSR001190
Group Standard:	Methyl Ethyl Ketone
HSNO Classes:	3.1B, 6.1E(oral), 6.3B, 6.4A, 6.9B(inhalation)

Section 16: Other Information

New Zealand National Poison Information Centre (24 hours): 0800 POISON [764 766] New Zealand Emergency Services: 111

For General Information: Corban Taylor, Glue Guru Limited Phone: +64 (09) 444-4878 Fax : +64 (09) 442-5975

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.

End of Safety Data Sheet.

Safety Data Sheet- Methyl Ethyl Ketone