

**JFP / CHEETAH  
MATERIAL SAFETY DATA SHEET  
Racing Methanol / Methanol**



**High Performance Fuels for High Performance Cars.**



## JFP MATERIAL SAFETY DATA SHEET Methanol



### SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

|                             |   |
|-----------------------------|---|
| Product Name:               | Methanol  |
| Other Names:                | Methyl Alcohol, Wood Alcohol                              |
| Product Use:                | Solvent, General Chemical                                 |
| UN Number:                  | 1230  |
| DG Class:                   | 3   |
| Supplier:                   | JFP, JUST FUEL PETROLEUM                                  |
| Address:                    | 2 Western Avenue, Sunshine, Victoria, 3020                |
| Telephone:                  | 03 9312 4788  |
| Email Address:              | mario@justfuel.com.au                                     |
| Web Site:                   | www.justfuel.com.au                                       |
| Facsimile:                  | 03 9311 6026  |
| Emergency Phone Number:     | 000 Fire Brigade and Police (available in Australia only) |
| Poisons Information Centre: | 13 11 26 (available in Australia only)                    |

This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with National standards and guidelines from the Australian Safety and Compensation Council (ASCC, formerly National Occupational Health and Safety Commission - NOHSC). The information in it must not be altered, deleted or added to. The Supplier will not accept any responsibility for any changes made to its MSDS by any other person or organization. The Supplier will issue a new MSDS when there is a change in product specifications and/or ASCC standards, codes, guidelines, or Regulations.

### SECTION 2: HAZARD IDENTIFICATION

**STATEMENT OF HAZARDOUS NATURE:** Classified as **Hazardous** according to the criteria of the Australian Safety and Compensation Council ASCC (formerly NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC:1008] 3rd Edition.

**E85 Fuel Ethanol** is classified as **Dangerous** Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

| Risk Phrases  | Safety Phrases   |
|---|--|
| R11 – Highly flammable.<br>R20/22 – Harmful by inhalation and if swallowed.<br>R36/38 – Irritating to eyes and skin.<br>R65 – May cause lung damage if swallowed (ULP).<br>R66 – Repeated exposure may cause skin dryness and cracking. | S2 – Keep out of reach of children.<br>S7/9 – Keep container tightly closed and in a well ventilated place.<br>S16 – Keep away from sources of ignition. No smoking.<br>S23 – Do not breathe vapour.<br>S24/25 – Avoid contact with skin and eyes.<br>S29 – Do not empty into drains.<br>S33 – Take precautionary measures against static discharges.<br>S36/37/39 – Wear suitable protective clothing/ gloves and eye/face protection.<br>S45 – In case of accident or if you feel unwell seek medical advice immediately (show the label whenever possible). |

## SECTION 3: ACCIDENTAL RELEASE MEASURES

|                               |   |
|-------------------------------|---|
| <b>Emergency Procedure:</b>   | In the event of a spill eliminate all sources of ignition and take measures to prevent static discharge. No smoking. Use water spray to disperse vapour. Clear area of all personnel not directly involved in the clean up. All personnel involved in the containment and disposal procedures to wear protective equipment as described in Section 8 to prevent skin and eye contamination and inhalation of vapours. Ventilate area well and ensure the atmosphere is safe before personnel return to the work area. |
| <b>Containment Procedure:</b> | Stop and contain the spill for salvage or absorb in inert absorbent material (e.g. soil, sand, vermiculite) for disposal by an approved method. Prevent run-off into drains and waterways. If contamination of sewers or waterways has occurred, advise the local emergency services.   |
| <b>Clean Up Procedure:</b>    | Wash the cleaned up area with copious volumes of water to remove any trace amounts of product. Ethanol mixes completely with water. Spills can be converted to non-flammable mixtures by dilution with water. Non-returnable containers should be de-gassed prior to disposal. Dispose of all waste containers and used drums in accordance with local authority guidelines.  |

## SECTION 4: HANDLING AND STORAGE

|                           |   |
|---------------------------|---|
| <b>Handling:</b>          | Use in well ventilated areas away from all ignition sources. Intrinsically safe equipment only must be used in area where this chemical is being used. The use of compressed air for filling, discharging, mixing or handling is prohibited due to the vapour hazard. Containers must be earthed to avoid generation of static charges when agitating or transferring product.  |
| <b>Storage:</b>           | Store in tightly closed containers in cool, dry, isolated and well ventilated areas away from heat, sources of ignition and incompatibles. Store away from oxidizing agents. Keep containers closed at all times; check regularly for leaks. Do not eat, drink or smoke in areas of use or storage. Observe State Regulations concerning the storage and handling of Dangerous Goods. Store with all precautions required for handling flammable liquids. The requirement of Australian Standard AS 1940the storage and handling of combustible materials should be observed. |
| <b>Incompatibilities:</b> | Not to be stored with explosives (Class 1), flammable gases in bulk (Class 2.1), poisonous gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidizing agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7). Exemptions may apply.  |

## SECTION 5: COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name:              | Proportion: | CAS Number: |
|-----------------------------|-------------|-------------|
| Methanol CH <sub>3</sub> OH | 100%        | 67-56-1     |

## SECTION 6: HEALTH HAZARD INFORMATION

## HEALTH EFFECTS

|                         |  |
|-------------------------|--|
| <b>Acute Swallowed:</b> | Unlikely under normal occupational exposures, but swallowing Methanol can cause blindness, dizziness, headaches and nausea. One to Four ounces can cause death. Initial symptoms resemble ethanol intoxication (drunkenness).                                |
| <b>Acute Eyes:</b>      | Irritation of eye upon contact. Chronic exposure can lead to impaired vision.  |
| <b>Acute Skin:</b>      | Prolonged or repeated contact causes dryness and cracking (dermatitis) of the skin due to its solvent action. May be absorbed through the skin in toxic amounts.   |
| <b>Acute Inhaled:</b>   | 1000 ppm may cause irritation of the mucus membranes.<br>5000 ppm may result in narcosis (deep unconsciousness) in one or two hours and eventually result in death.<br>Inhalation of methanol vapour may worsen conditions such as emphysema and bronchitis. |
| <b>Chronic:</b>         | Long term exposure may result in dermatitis with redness and scaling of the skin.<br>Repeated exposure to vapour concentrations of 1200 - 8300 ppm can lead to impaired vision.  |

 FIRST AID

|                          |   |
|--------------------------|---|
| <b>Swallowed:</b>        | If conscious, dilute stomach contents by giving large amounts of water or milk. Transport to medical attention immediately.   |
| <b>Eyes:</b>             | Flush eye with running water for a minimum of 15 minutes. Keep rotating the eyes to ensure complete flushing. Seek medical attention promptly if irritation persists or any loss of vision occurs.  |
| <b>Inhaled:</b>          | Remove promptly to fresh air, restore or assist breathing, administer oxygen as required, obtain medical attention.   |
| <b>Advice to doctor:</b> | Toxic effects from repeated contact to methanol are accumulative and affect the central nervous system, especially the optic nerve. Symptoms can be slow to appear, from 9 to 36 hours after exposure and they may last for several days. Methanol is harmful by inhalation of vapours, ingestion of liquid or by prolonged repeated contact with the skin and in the body, the products formed by its oxidation are formaldehyde and formic acid, both of which are toxic. |

## SECTION 7: FIRE FIGHTING MEASURES

|  |  |
|--|--|
| <b>Flammability:</b>                     | Highly flammable liquid. May form flammable mixtures with air. Burns with a colourless flame. The vapour is heavier than air and may travel along the ground; distant ignition and flash back are possible.<br>Run off to sewers and drains may cause explosions. Isolate for at least 800 metres in all directions if tanks or tankers are involved. The use of compressed air for filling, discharging, mixing or handling is prohibited due to the vapour hazard.<br>All vessels must be earthed to avoid generation of static charges when agitating or transferring solvents. Avoid all ignition sources. Containers previously holding ethanol products must be degassed before entry or subjected to sources of ignition, Refer AS 1940 |
| <b>Suitable extinguishing media:</b>     | Use water, dry chemical, carbon dioxide (CO <sub>2</sub> ) BCF or alcohol stable foam.   |
| <b>Hazards from combustion products:</b> | Burning can produce carbon monoxide and/or carbon dioxide.   |

## SECTION 7 CONTINUED: FIRE FIGHTING MEASURES

|  |  |
|--|--|
| <b>Special protective precautions and equipment for fire fighters:</b> | Highly flammable liquid. Use water to cool exposed containers. Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire.<br>Spills and leaks may be washed away with copious volumes of water, fog or spray.<br>Firefighters must wear self contained breathing apparatus with full face-mask and protective clothing. |
| <b>HAZCHEM Code:</b>   | 2WE  |

## SECTION 8: PRECAUTIONS FOR USE / PERSONAL PROTECTION

|                            |  |
|----------------------------|--|
| <b>Exposure Standards:</b> | Worksafe Australia Exposure Standard:<br>200 ppm (260 mg/m <sup>3</sup> ) skin, time weighted average (TWA)<br>250 ppm (328 mg/m <sup>3</sup> ) skin, short term exposure limit (STEL) |
|----------------------------|--|

## ENGINEERING CONTROLS

|                     |   |
|---------------------|---|
| <b>Ventilation:</b> | Local exhaust ventilation and/or mechanical (general) exhaust is recommended where vapours are likely to be generated. All such equipment must be intrinsically safe. |
|---------------------|---|

## PERSONAL PROTECTION

|                                |  |
|--------------------------------|--|
| <b>Personal Hygiene:</b>       | Protective clothing (gloves, coveralls, boots, etc.) should be worn to prevent skin contact. Always wash hands before smoking, eating, drinking or using the toilet.<br>Wash contaminated clothing and other protective equipment before storing or re-using.  |
| <b>Skin Protection:</b>        | Avoid skin contact by the use of approved chemical resistant gloves and aprons – PVC or Neoprene (AS 2161).  |
| <b>Eye Protection:</b>         | Avoid eye contact by wearing monogoggles, chemical goggles with side shields or face shield (AS/NZS 1337) whenever exposed to vapour or mist or if there is a risk of splashing liquid in the eyes.<br>Safety showers with eye-wash should be provided in all areas where product is handled.  |
| <b>Respiratory Protection:</b> | None should be needed if engineering, storage and handling controls are adequate to ensure that atmospheric contamination is kept below the National Standard.<br>Where vapour concentrations are likely to approach or exceed the National Standard, an approved organic vapour respirator (AS/NZS 1715 and 1716) must be worn.<br>In high vapour concentrations, or in suspected oxygen deficient atmospheres such as empty vessels or confined spaces, use air supplied hood. |
| <b>Smoking:</b>                | Smoking must be prohibited in all areas where this product is used.  |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|   |                         |
|---|-------------------------|
| <b>Appearance:</b>                            | Clear colourless liquid |
| <b>Odour:</b>                                 | Slight Alcohol Odour    |
| <b>PH, at stated concentration:</b>           | Not available           |
| <b>Vapour Pressure:</b>                       | 92mm Hg @ 20°C          |
| <b>Vapour Density:</b>                        | 1.1 (air = 1)           |
| <b>Boiling Point/range (°C):</b>              | 64.5°C                  |
| <b>Melting Point (°C):</b>                    | -97.8°C                 |
| <b>Solubility in water:</b>                   | Totally miscible        |
| <b>Specific Gravity (H<sub>2</sub>O = 1):</b> | 0.792                   |

## FLAMMABLE MATERIALS

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Flash Point:</b>              | 11°C closed or open cup |
| <b>Evaopration Rate:</b>         | 500                     |
| <b>Flammable Limit LEL:</b>      | 7%                      |
| <b>Flammable Limit UEL:</b>      | 36%                     |
| <b>Autolgnition Temperature:</b> | 385°C                   |

## ADDITIONAL PROPERTIES

|   |  |
|---|--|
| <b>Evaporation Rate</b>   | 253 ( n-Butyl Acetate = 100) (Ethanol) |
| <b>Volatile Organic Compounds Content (VOC):</b><br>(as specified by the Green Building Council of Australia) | 100%                                   |
| <b>% Volatiles:</b>   | 100%                                   |

## SECTION 10: STABILITY AND REACTIVITY

|  |   |
|--|---|
| <b>Chemical Stability:</b>               | Stable  |
| <b>Incompatible Materials:</b>           | Will react with strong oxidizing agents.                    |
| <b>Conditions to avoid:</b>              | Heat, sparks, flame and build - up of static electricity.   |
| <b>Hazardous Decomposition Products:</b> | Burning can produce carbon monoxide and /or carbon dioxide. |
| <b>Hazardous Reactions:</b>              | None  |

**SECTION 11: ECOLOGICAL INFORMATION**

|                                       |   |
|---------------------------------------|---|
| <b>Eco-toxicity:</b>                  | Ethanol:<br>Toxicity to fish (acute): LC0/Golden ide/: >1000 mg/l/48 h<br>Toxicity to daphnia: EC50/Daphnia magna/: >1000 mg/l/24 h |
| <b>Persistence and Degradability:</b> | Ethanol:<br>Degree of elimination: 94%<br>Evaluation: biodegradable   |
| <b>Mobility:</b>                      | No data available   |

**SECTION 12: DISPOSAL CONSIDERATIONS**

Suitable for incineration by approved agent under controlled conditions if permitted by local authorities, otherwise disposal must be in accordance with local waste authority requirements.  
Product must be contained and not disposed to sewerage systems, drains or waterways. Advise flammable nature.  
Empty containers must be decontaminated by rinsing with water.

**SECTION 13: TRANSPORT INFORMATION**

|                                      |  |
|--------------------------------------|--|
| <b>Proper Shipping Name:</b>         | METHANOL   |
| <b>UN number:</b>                    | 1230   |
| <b>DG Class:</b>                     | 3  |
| <b>Subsidiary Risk 1:</b>            | 6.1  |
| <b>Packaging Group:</b>              | II   |
| <b>HAZCHEM Code:</b>                 | 2WE  |
| <b>Special Precautions for User:</b> | Refer to incompatibilities in section 4 and stability and reactivity information in section 10 |
| <b>EPG Number:</b>                   | 3A3  |
| <b>IERG Number:</b>                  | 16   |
| <b>Packaging Method:</b>             | 3.8.3RT1   |

**SECTION 14: REGULATORY INFORMATION**

|                          |    |
|--------------------------|----|
| <b>Poisons Schedule:</b> | S6 |
|--------------------------|----|

**SECTION 15: OTHER INFORMATION****For further information on this product, please contact:**

Just Fuel Petroleum Pty Ltd (ABN 62 080 584 578)

2 Wester Avenue, Sunshine. Victoria, 3020

**Phone:** 03 9312 4788**Fax:** 03 9311 6026

High Performance Fuels for High Performance Cars.

**ADDITIONAL INFORMATION****Australian Standards References:**

|                |   |
|----------------|---|
| <b>AS 1020</b> | The Control of Undesirable Static Electricity   |
| <b>AS 1076</b> | Code of Practice for selection, installation and maintenance of electrical apparatus and associated equipment for use in explosive atmospheres (other than mining applications) – Parts 1 to 13 |
| <b>AS 2380</b> | Electrical equipment for explosive atmospheres – Explosion Protection Techniques (Parts 1 to 9)   |
| <b>AS 3000</b> | Electrical installations (known as the Australian/New Zealand Wiring Rules)   |

**AUTHORISATION**

First Issue

Authorised by: Operations Manager – Just Fuel Petroleum

Date of Issue: June 2010

Whilst the information contained in this document is based on data which, to the best of our knowledge, was accurate and reliable at the time of preparation, no responsibility can be accepted by us for errors and omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage caused by any person acting or refraining from action as a result of this information.