

Modified Article	Date of Application	Date of Publication

#### 1. GENERAL

- (a) Any fuel used in a *Competition* must comply with the prescriptions of this Schedule. A fuel must be used without additives other than those permitted herein. Other than for pump fuel, the mixing of fuels from different oil companies, or of different grades and/or types of fuel from the same oil company is forbidden.

An oil company shall be deemed to be either:

- (i) a company with oil refining capacity either in Australia or Internationally;
  - (ii) a company with roadside retail fuel bowser outlets within Australia; or
  - (iii) a company with national distribution capability, and specifically recognised by *Motorsport Australia*.
- (b) Each Group/Classification or category or *Event* regulation/s must detail the fuel which is permitted in accordance with this Schedule.
- (c) It is not permitted to use a fuel of any type that contains lead in any form.

#### 2. COMMERCIAL FUEL

A petrol, automotive diesel or liquefied petroleum gas (LPG) or ethanol blended fuel, e.g. "E85" (as defined below) produced by an oil company and available for commercial sale in all States and mainland Territories of Australia.

With the exception of Ethanol Blended Fuels, all Commercial Fuel shall comply with the Fuel Standards Determinations made under Section 21 of the Fuel Quality Standards Act (2000).

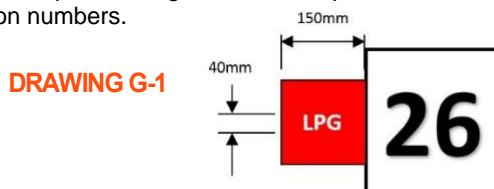
Fuel which is the subject of Approvals made under Section 13 of the Fuel Quality Standards Act (2000) shall not be regarded as Commercial Fuel.

##### 2.1 PUMP FUEL:

A Commercial Fuel (as defined above), with a maximum ethanol content of 10%. Pump Fuel must be available for sale on demand from a roadside retail bowser outlet at each of at least five separate service stations in each of at least three Australian States. A mixture of Pump Fuels is permitted (e.g. brands of unleaded petrol [ULP] may be mixed; up to 10% ethanol-blended fuels and ULP may not be mixed).

##### 2.2 LIQUEFIED PETROLEUM GAS:

A commercial LPG being either butane, propane or a mixture of both, and of a type which is dispensed from a roadside retail bowser. Where an *Automobile* utilises LPG, a sign in the form of the white letters LPG on a red reflective background, as per drawing G-1, must be placed immediately to the left and centralised vertically to all competition numbers.



**Note:** Unless specifically approved otherwise by *Motorsport Australia*, LPG must not be used in a circuit race involving re-fuelling.

##### 2.3 DIESEL:

Diesel fuel must be gas oil corresponding to the following specifications:

- (a) hydrocarbon level, 99.0 % by weight minimum
- (b) specific gravity, 860 kg/m<sup>3</sup> maximum

- (c) cetane number 55 maximum (ASTM D 613)
- (d) calculated cetane number 55 maximum (ASTM D 976-80).

## 2.4 ETHANOL BLENDED FUEL:

Ethanol Blended Fuel is defined as only containing the following constituents:

- (a) Anhydrous fuel grade ethanol (between 70% and 85% ± 5% v/v)
- (b) Unleaded petrol (15% and 30% ± 5% v/v)
- (c) Corrosion inhibitor (optional)
- (d) Colouring dye (optional)
- (e) Other constituents (0.2% max v/v)

## 3. RACING FUEL

### 3.1 UNLEADED RACING FUEL:

Unleaded racing fuel is defined as an unleaded petrol produced by an oil company in compliance with the specifications detailed in the *Code*. Such Unleaded Racing Fuel supplied from a drum is permissible.

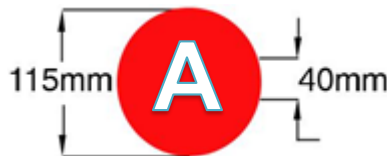
Specific Group regulations (i.e. 5<sup>th</sup> Category Historic) may permit the use of an alternate Unleaded Racing Fuel.

## 4. ALCOHOL

Alcohol fuel may only be used where specified for a 5th Category *Automobile* or where a specific Group regulation permits its use.

- 4.1 For other than a 5th Category *Automobile*, such fuels must contain a minimum 95% V/V of methanol and/or ethanol and a maximum 5% ketone content. Nitromethane is expressly prohibited.
- 4.2 For an individual *Automobile* of the 5th Category, specific alcohol based fuels with a constitution other than as described in 4.1 above may be approved; the constitution of such fuels will be listed on the Certificate of Description of the particular *Automobile* in question and must be used as specified in that *Automobile*.
- 4.3 In each such case, it is mandatory that an *Automobile* using alcohol fuel shall carry a symbol in the form of the letter "A" in white on a red circle of approximately 115mm diameter as shown in drawing G-2 below. This symbol must be placed adjacent to the *Competition* number on each side of the *Automobile*, and the filling cap of the fuel tank.

DRAWING G-2



## 5. BIO FUELS

A petrol, diesel or alcohol fuel produced exclusively from sustainable resources. Where such a fuel does not meet the requirements of Articles 2, 3 or 4 above, its use must be specifically authorised by the Fuels Regulation Committee.

## 6. OXIDANTS

Only air may be mixed with the fuel as an oxidant. The use of Nitrous Oxide must be approved by *Motorsport Australia* and included in event specific regulations.

## 7. ADDITIVES

Any substance, other than air, incorporated into the fuel subsequent to its final blending by the producing oil company is deemed to be an additive. Nothing in the foregoing shall be deemed to prohibit the addition of water, an approved lead replacement additive or a lubricant provided that such additive does not increase the octane or cetane rating, oxygen content or specific heat content of the fuel.

Specific Group regulations (i.e. 5<sup>th</sup> Category Historic) may permit the use of alternate additives.

List of Approved Lead Replacement Additives:

- (i) Valvemaster®,
- (ii) Redline Lead Substitute®,
- (iii) Penrite Valve Shield®,
- (iv) PM 800 Fuel System Conditioner®,
- (v) Elf Millesim®.

**7.2** Ethanol-blended fuel may utilise a fuel stabiliser and corrosion inhibitor provided the same conditions apply as Article 7.1.

## **8. FUEL REGULATION COMMITTEE**

### **8.1 APPOINTMENT:**

The Fuel Regulation Committee (FRC) has been established by *Motorsport Australia* for the purpose of considering the application of restrictions to fuel usage. The FRC will be appointed by the *CEO of Motorsport Australia*.

### **8.2 APPLICATION FOR RESTRICTIONS:**

Requests for restrictions to fuel usage may only be addressed to the Committee by:

- (a) Sporting Commission of *Motorsport Australia*;
- (b) The holders of valid Activity, Series or Championship Management contracts;
- (c) Persons or organisations recognised by *Motorsport Australia* as representing a particular Group/Category/Classification of *Automobile*;
- (d) An *Organiser*.

## **9. FUEL TESTING**

Fuel samples may be drawn for testing from a competing *Automobile* at any time during the period of time from the commencement of the *Event* until the vehicle is released from *Parc Fermé* at the conclusion of the *Event*, should one be organised.

It is the responsibility of the *Competitor* to provide the means by which a fuel sample/s may be taken from the *Automobile*; the method being subject to the approval of the Chief Scrutineer. Sampling requiring the disconnection of hoses containing fuel under pressure is not acceptable.

Whilst the fuel samples for testing are being taken, the *Competitor*, or his nominated representative, must be in immediate attendance to observe the process. Where the *Competitor* or his nominated representative cannot be present within a reasonable time, the Chief Scrutineer must notify the Stewards, who shall appoint a proxy observer, being an Official of the meeting, who shall act as the nominated representative of the *Competitor*.

For a National Championship and Series, and other *Event* as specified in event regulations, the *Competitor* must declare to the Scrutineers, at the time of sampling, the brand and type of fuel that is in the *Automobile* fuel tank. Any additive, including lubricants, must also be disclosed to the scrutineers. Where a permitted mixture of fuels is present, all component fuels must be declared.

Samples shall be tested according to procedures A or B below.

#### **Test Procedure A: Testing at the Event**

The Chief Scrutineer may choose to test fuel samples at the event. To this effect, one sample of fuel may be taken for testing under the conditions outlined above from each or any *Automobile*. The *Competitor* may, at their discretion, request a second sample be drawn at the same time. After being duly identified and sealed, this second sample may be retained by the *Competitor*\*\*.

Testing at the event shall be limited to:

- (a) physical observation of the sample (colour, opacity)
- (b) testing using whatever specialist equipment is available at the event (e.g. electrical conductivity, density, gas chromatography etc.)

Where an infringement is raised as a result of such testing, the Chief Scrutineer or their representative must give evidence at the subsequent Stewards Hearing or Inquiry, although they will not be accorded the status of

“Judge of Fact”. Notwithstanding this, the Stewards will be obliged to take into consideration any evidence thus presented.

\*\*The *Competitor* may use the retained sample in their defence provided that the seal of the sample retained by the *Competitor* is broken in the presence of the Stewards. Where the Scrutineer deems that no action is necessary, the container holding the *Competitor* sample shall be returned by the *Competitor* to the Scrutineer upon request.

#### **Test Procedure B: Testing by a *Motorsport Australia* approved Laboratory**

*Motorsport Australia* shall maintain a list of approved laboratories for the testing of fuel.

For tests by an approved laboratory, two fuel samples must be drawn and sealed into identified containers. The seal on each container must be affixed in such a way as to ensure the rupture of the seal upon the opening of the container. Each seal must bear identification of the *Event*, the name and signature of the Scrutineer taking the sample and the name and signature of the *Competitor*. The samples (Samples A and B) must then be sent to *Motorsport Australia*, who will send Sample A to a *Motorsport Australia* approved laboratory. The determination of fuel type and composition shall be by comparison against a reference library of results for known fuel types determined by the method ASTM D-3710-95 (or equivalent).

Where the approved laboratory notifies *Motorsport Australia* that Sample A has been found to be not in conformity with the prescriptions contained herein, *Motorsport Australia* shall lodge sealed fuel Sample B with the same approved laboratory. Where the results of the second test Sample B corroborate the initial determination of Sample A, the fuel shall be deemed to be not in conformity with the prescriptions of the present Schedule. This finding shall be binding on any Stewards' Hearing, Appeal Tribunal or any subsequent AMSAC Hearing. Where a discrepancy exists between the results of Samples A and B, no action shall be taken against the *Competitor*.

#### **Note:**

There are costs associated with fuel testing by a *Motorsport Australia* approved laboratory. Prior to any testing of this nature the *Motorsport Australia* Technical Department must be advised to inform on costs.

There are special conditions associated with the transport and handling of flammable liquids. Contact *Motorsport Australia* to ascertain an appropriate method of transporting the fuel.

## **10. HEALTH WARNING**

All participants in motorsport are reminded that fuels, oils, lubricants and coolants are highly specialised substances. Apart from the ever-present risk of fire, participants must be aware that these agents may contain substances that are extremely dangerous to one's health if misused, inhaled or allowed into contact with human skin. Some of the components of these fuels, oils and lubricants are suspected of having the potential to cause cancer in rare instances. The use of petrol as a general cleaning and washing agent is a common misuse of a potentially dangerous substance.