

**1. Phraseology.** The following nomenclature, definitions and abbreviations shall be adopted in these Regulations, in the Appendices thereto, in all SRs and for general use.

### 1.1. Organisational Nomenclature

**FIA (Fédération Internationale de L'Automobile).** The International Federation of Recognised Automobile Clubs.

**The Code (Code Sportif International).** International Sporting Code of the FIA.

**CIK-FIA (Commission Internationale de Karting).** The FIA Commission responsible for Karting.

**ASN.** A National Automobile Club or other national body recognised by the FIA or the CIK-FIA as sole holder of sporting power in a country.

**MSA. (The Royal Automobile Club Motor Sports Association Ltd.).** The sole body (ASN) to which the FIA and the FIA has delegated the control of motor sport in the British Isles (excluding The Republic of Ireland).

**MSC. (The Motor Sports Council).** The Sporting Commission of the MSA.

**Club.** Any body recognised by the MSA as a Club.

### 1.2. Definitions

**Adequate Strength.** That the component concerned is of sufficient strength to fulfil the function for which it was intended.

**Advertisement.** Any lettering, additional trademark or symbol appearing on a vehicle including any border or background that is distinguishable from the underlying surface on which it appears.

**Aerofoil.** Any device or part of a vehicle (excepting normal and conventional styled bodywork) that has a principal effect of creating aerodynamic downforce. Within this definition should be included forward facing gaps or openings in the bodywork, but will not include spoilers in the form of raised surfaces continuous with the body surface and not wider than the body surface. It is not permitted to mount aerofoils on unsprung parts of the vehicle.

**Appeal.** An appeal is a formal complaint, lodged within specified time limits, by an entrant or competitor about a decision, act or omission by an official of a meeting [O 6]

In the event of an appeal being made against a decision such entrant or competitor must meet one or more of the following criteria:-

- (1) Have been involved in the incident giving rise to the decision.
- (2) Have been the party who lodged the protest which resulted in the decision.
- (3) Have been the party against whom a penalty has been imposed.

**Approved Formulae.** A set of Regulations, approved by the MSA, providing the parameters for a vehicle to be used in a specific competition or series of competitions.

**Autocross.** A speed event on a closed circuit with a grass or unsealed surface.

**AutoSOLO.** A type of Autotest subject to the same criteria (see Section F).

**Autotest.** A competition in which marking during the event is based solely on a competitor's performance in manoeuvring tests. These tests may be at one or more sites on private property.

**Ballast.** Non-functional material added to increase vehicle weight. Any ballast must be permanently fixed to the structure of the vehicle and sealed by Scrutineers' seals.

**Bodywork/coachwork.** Fixed External: side, front, rear and top surfaces of the vehicle licked by the air stream, excluding the underside. Internal: as defined in FIA Appendix 'J'.

**Car/Vehicle.** A land vehicle propelled by its own means, running on at least four wheels not in line, that must normally be in contact with the ground and of which at least two must effect the steering and at least two the propulsion.

**Championship.** An event or series of events organised for the purpose of establishing the right to an individual or collective title.

**Circuit.** The whole area used for an event under the control of the organising club and/or a circuit owner.

**Class.** Division of vehicles by their engine capacity or any other means of distinction.

**Classic Reliability Trial.** A competition based on the ability to climb hills or traverse difficult sections non-stop and that may use the public highway for all or part of its route or may be entirely on private ground.

**Closed Car.** A vehicle that complies with the requirements for a saloon except that it need only have two seats. If a convertible the hood or top must be erected whilst in competition, *unless otherwise stated in SRs.*

**Clubman's Event.** An event confined to members of the sole organising club, and, by invitation, to members of a limited number of other clubs.

**Clubsport Event.** Specified events confined to bona fide members of the organising club and the members of no more than two others.

**Co-Driver.** The second member of each crew competing in Special Stage Rallies.

**Competition.** That part of an Event that is given a competitive nature by the publication of results. It must be completed by the end of the meeting. Provided that an individual specific event, such as a gymkhana or treasure hunt, shall not be a competition for the purpose of these Regulations if, on being informed in writing of the details of the proposed event, the MSA has waived in writing the necessity for an Organising Permit and the event takes place in accordance with such details.

**Competitor.** A person or body whose entry is accepted for or who competes in any event whatsoever, whether as Entrant, Driver, Co-driver, Navigator or Passenger.

**Competition Numbers.** Numbers displayed on vehicles in competition for identification purposes.

**Control or Check.** Any point that competitors must visit during an event. A Control will be manned by officials; a Check may or may not be manned. If the term Time Control is used this will imply that the competitor's time of arrival at or departure from this point is recorded.

**Control Line.** The line by reference to which a vehicle is timed or its performance in a competition is determined.

**Course.** The track, plus all run-off areas, up to and including, safety barriers, fences and walls.

**Cylinder Volume.** The volume swept in cylinder or cylinders by the upward or downward movement of the piston or pistons in relation to such cylinder or cylinders. Cylinder volume shall be expressed in cubic centimetres. For all calculations relating to the cylinder volume of engines, the symbol  $\pi$  will be regarded as equivalent to 3.1416.

**Data Acquisition.** The collection and storage of data on a vehicle is termed "data acquisition" or "data logging". Data loggers acquire and store data until the data is downloaded.

For karting applications, data loggers are acceptable, provided there is no electrical connection between the data logger and the ignition system of the kart other than to an insulated section of the high-tension (HT) lead. Any lap-timing device used as part of the data logger must adhere to the lap-timing section of these definitions.

In karting terms, a data logger is a combination of an electronic memory and a series of sensors and looms, usually allied to a beacon detector for lap-timing. Data is usually viewable on a software program on a computer after download from the memory. A data logger may have driver instrumentation connected to it for on track display of information to the driver.

**Disqualification.** A person or body shall be said to be disqualified when he/it has been permanently forbidden to take part in any event whatsoever.

**Drag Race.** A race between two cars over a flat and straight course of 440yds, with a minimum braking distance of 800yds, and a minimum width of 50ft.

**Drag Racing Vehicle.** Vehicle designed and prepared to obtain maximum acceleration over a straight course.

**Driver.** A person nominated as the driver of a vehicle in any event.

**Driver Instrumentation.** Driver instrumentation is the medium by which information is displayed to the driver while the vehicle is on the circuit or in the pits/paddock. Driver instrumentation can be driven either by stand-alone sensors, or driven by a data logger. Sensors to drive the instrumentation are considered as part of the driver instrumentation.

For karting applications driver instrumentation is permitted, whether the display is stand-alone or used in conjunction with a data logger.

**Duration of Meeting or Event.** A Meeting is considered to have begun as from the beginning of the first event, and shall end when the last event has finished. An Event is considered to have begun as from the time scheduled for the beginning of administrative checking and/or scrutineering and shall include practice and the competition itself. It shall end upon the expiry of the time limit for protests or appeals, or the end of any hearings.

**Entrant.** The person or body responsible for making an Entry into a Competition and responsible for all matters pertaining to that Entry.

**Event.** A single activity with its own results or one part or round of a series of events comprising a Championship. It may comprise: free practice and/or qualifying practice sessions, heats and a final, or be divided in some similar manner.

**Exclusion.** Exclusion forbids the person concerned to take part in any particular competition, or in several sporting competitions of the same meeting. Exclusion may be applied in retrospect, by the deletion of any result in any competition.

**Finishing Line.** The last control line on a course.

**Fireproof Coating.** A coating of fire resistant GRP not less than 2mm thick.

**Forced Induction.** Any device capable of augmenting atmospheric pressure to increase the induction of air or fuel/air mixture into the combustion chamber (Superchargers, Turbochargers etc.). Any means of artificially reducing induction air temperature (e.g. packing with solid CO<sub>2</sub> etc.) is prohibited. Ram effects entirely due to the forward motion of the vehicle or tuning of induction or exhaust pipe length are not included within this definition.

**Fuel (see Pump Fuel).** All substances fed into the combustion chambers of an engine excepting only:

- (a) Atmospheric air and water vapour contained naturally therein.
- (b) Lubricating oil exceeding in viscosity 5 cS at 100°C.
- (c) Anything recommended in the relevant vehicle manufacturer's instruction manual as normal treatment for the specific type of recognised production car.

**Ground Clearance.** The clearance between the ground and the lowest part of the bodywork, or of the suspended part of the car, in normal trim with the driver aboard [E 12.19.9].

**Gymkhana.** An event held wholly on private ground and in which no test is determined solely by the speed of the competing vehicle, or by the skill of the driver in controlling the vehicle, and in which if there are to be timed tests, there will be at least an equal number of untimed tests. No test may be timed to an accuracy of less than 5 seconds.

**Handicap.** A method laid down in the SRs for the purpose of equalising the chances of the competitors.

**Hard Top.** An accessory manufactured in rigid material used in place of or to replace collapsible fabric cockpit hoods on open cars. When a hard top is fitted to a vehicle (even temporarily) the vehicle is then defined as closed and must have a rear window installed, *unless otherwise stated in SRs.*

**High Speed Trial.** A competition run on a circuit in which competitors are required to maintain a minimum speed for a specified time or distance, or cover a minimum distance in a specified time, and may or may not benefit from improving upon the minimum specified. Deemed to be a race and subject to the appropriate conditions.

**Holder of Records.** The driver or drivers who were driving the vehicle when the record was achieved.

**International Event.** An event is International when it is entered on the International Calendar and is open to competitors and drivers of various nationalities.

**International Record.** The best performance accomplished in a determined class or group. There are International Records for Land Vehicles, Automobiles, Special Vehicles and Ground Effect Vehicles.

**Kart.** A small four wheel racing vehicle with a rigid frame and no suspension of the wheels. The engine(s) drive the rear wheels only and these rear wheels must be joined by a single piece rear axle with no differential action between the two rear wheels. The Driver will be seated with feet to the fore.

**Kit Cars** – (see Production Kit Car).

**Land Vehicle, Automobile, Special Vehicle, Ground Effect Vehicle**

(a) **Land Vehicle.** A vehicle propelled by its own means that continually takes a real bearing (pressure) on the ground either mechanically or indirectly by 'ground effect'. The propelling device and steering system are constantly and entirely controlled by a driver on board the vehicle.

(b) **Automobile.** See Car/Vehicle.

(c) **Special Vehicle.** Vehicle having at least four wheels not in line that is steered by at least two wheels and is propelled otherwise than through the wheels.

(d) **Ground Effect Vehicle.** Vehicle that takes a bearing on the ground by the means of a pressurised air cushion, magnetised levitation or similar means.

**Lap-timing.** For karting applications, a trackside beacon emitting a continuous output of infra red light is permitted for use in conjunction with a data logger or for stand-alone lap-timing purposes. The position of the trackside unit is either to be located outside of the safety barriers or to be approved by the officials of the event.

**Licence.** A certificate of registration issued under the Code by an ASN to any person or body wishing to participate in competitions held under the Code. The holder of a licence is presumed to know and abide by the Code and these Regulations.

**Licence Number.** The number on a licence.

**Light Alloy.** Any alloy containing more than 10% aluminium, magnesium or titanium.

**Local Record.** A record established on a permanent or temporary track approved by the MSA, whatever the nationality of the competitor.

**Main Chassis Structure**

(a) Single seater racing cars – the fully sprung structure of the vehicle to which the suspension and/or spring loads are transmitted, extending longitudinally from the foremost front suspension mounting on the chassis to the rearmost one at the rear.

(b) Other vehicles – the entire original shell supporting chassis frame of the original body/chassis structure from which nothing may be removed except by normal removal of nuts and/or bolts. No part may be removed by cutting, fracturing or derivetting.

**Meeting.** An organised assembly of competitors and officials, including one or more competitive or non-competitive activities, taking place within a defined period, and is governed by the same sets of Regulations.

**Methanol.** Methyl Alcohol CH<sub>3</sub>OH. This is a clear colourless liquid, miscible with water acetone and other ketones, the esters, aromatic and highly unsaturated hydrocarbons, and castor oil. It is not miscible in all proportions with straight-run petroleum spirit or mineral oil. B.P. 64.7°C, Specific Gravity 0.796, Flash Point 32°F. For Speed Events, British Standard 506 with an allowance of up to 10% Acetone, is permitted.

**Mile and Kilometre.** For all conversions of English to Metric measurements and vice versa, the mile shall be taken as 1.609344 kilometres, and the kilometre shall be taken at 0.62137 of a mile.

**Modification.** Any change in the design, material, shape, dimensions and/or surface finish of a component, except for basic manufacturing processes, normal wear and published service or repair procedures.

**Modified Sports Cars.** A vehicle listed by maker's name and model description for modified sports car racing.

**Nationality.** The nationality of a competitor or driver for the purpose of these Regulations shall, after the grant of a licence, be deemed to be that of the ASN that last issued a licence.

**National 'A' Event.** An event is National 'A' when it is open only to competitors and drivers holding an appropriate National 'A' or higher licence issued by the MSA.

**National 'B' Event.** An event is National 'B' when the competitors or drivers who take part in the competition have to comply with particular conditions of eligibility for instance:

- (a) Membership of an Invited Club or Championship.
- (b) A Competition confined to vehicles of a particular make.

**National Record.** A record made within the territory of the MSA regardless of the nationality of the competitor.

**Navigational Scatter Event.**

A navigational event where there is no competition on the public highway and falls within the provisions of automatic authorisation under the Motor Vehicles (Competition and Trials) Regulations (where applicable). Competitors should be required to visit a number of points at random and no merit should be attached to visiting more than 75% of the points listed. The majority of the points should not be readily accessible without leaving the car and the car shall be an incidental means of transport between the various points.

**Navigator.** The second member of each crew competing in Rallies, or other events, held entirely on the public highway.

**Number Plate.** The plate that would normally carry the registration number of the vehicle, were it to be run on public roads. Maximum permitted size 55cm x 12cm.

**Off-Road Junior Trials Vehicle.** A two wheel drive vehicle adapted from a front engined lawn or garden tractor with the cutter deck and associated ancillaries removed, and fitted with a four stroke petrol or diesel vertical crankshaft engine of the Industrial and Commercial restricted type.

**Off-Road Vehicle.** A vehicle that has a manufacturers' design function to traverse arduous cross country terrain.

**Off-Road Event.** An event intended only for off-road vehicles, that may be defined as follows:

(a) **Competitive Safari.** A timed event taking place on private ground that will be laid out over one or more courses and at one venue only.

(b) **Off-Road Orienteering.** An event involving a cross country map reading exercise where the use of a vehicle is merely incidental as a means of transport, and in which the experience or skill of a driver plays no part.

(c) **Off-Road Vehicle Timed Trial.** A trial taking place on one area of private ground in which the marking during the event is mainly based upon the ability of Competitors to climb hills or traverse difficult sections non-stop, but where the results are decided predominantly by the time taken to traverse those sections.

(d) **Off-Road Vehicle Trial.** A trial in which the marking for the event is mainly based upon the ability of Competitors to climb hills or traverse difficult sections non-stop, and in which the mileage upon a public highway does not exceed 50 miles.

(e) **Hill Rally.** An event of which the main portion of the route is cross country, and in which the marking for maintaining a set time schedule shall form a substantial part of the competition. A Hill Rally may include tests or observed sections.

(f) **Point to Point.** An event the object of which is for a team of vehicles to seek and visit points spread out on open ground. The points must be accessible by vehicle(s) and it may require team effort to reach and pass through the points. Public highways must not be used.

(g) **Team Recovery.** An event the object of which is for a team of vehicles, by self recovery or team effort, to proceed through an observed section in the shortest possible time.

(h) **Winch Recovery.** An event the aim of which is to move an object (normally a demobilised vehicle) by winching through a gate and along a specified course.

(i) **Promotional Event.** A non-competitive event designed solely to enable participants to experience driving their vehicles off-road, and to introduce them to organised off-roading.

(k) **Challenge Event.** An event comprising two or more other Off Road event disciplines into a single event where each section will be run to the full safety requirements of that event type. The minimum crew and vehicle safety and eligibility will be determined by that of the highest level of the chosen event types comprising the event that will determine the type of Permit issued.

**Off-Road Racing.** A race on a grass or unsealed surface.

**Open Car.** Any vehicle having not less than two seats and which is not classified as a Saloon or Closed car.

**Organising Club.** A club registered with the MSA and responsible in all respects for the organisation of an event.

**Organising Committee.** A committee authorised by the organising club to act on their behalf. The organising committee will take the place of such club for the purpose of these Regulations except that the club will be responsible for the acts and omissions of such organising committee as if such acts and omissions were their own.

**Organising Permit.** The documentary authority to organise and hold a competition, granted solely by the MSA.

**Original Equipment.** Parts fitted to new vehicles within the selling specification, excluding alternatives.

**Pace Notes.** Any information, in any recorded form, relating to a Special Stage, that has not been provided to all competitors by the organisers of that event.

**Paddock.** An area provided by the organisers for the parking of competing and support vehicles, and for the purpose of servicing competing vehicles.

**Parc Fermé.** An area designated by and under the control of the organisers and officials of an event and into which any entrant or competitor must place the competing vehicle as and when directed by the organisers or officials including the route instructions of the event.

**Passenger.** A person, other than the driver, conveyed on a vehicle during a competition.

**Period Defined Vehicles (Non Rally)**

A – (Veteran) Cars built before 1/1/1905.

B – (Edwardian) Cars built between 1/1/1905 and 31/12/1918.

C – (Vintage) Cars built between 1/1/1919 and 31/12/1930.

D – (Post Vintage Thoroughbred) Cars built between 1/1/1931 and 31/12/1946.

E – Cars built between 1/1/1947 and 31/12/1961 (up to 31/12/1960 for single seater and two seater racing cars).

F – Cars built between 1/1/1962 and 31/12/1965 (from 1/1/1961 for single seater and two seater racing cars and up to 31/12/1966 for Formula 2).

G – Cars built between 1/1/1966 (1/1/1964 for Formula 3) and 31/12/1971 that are no longer eligible for current competition.

H – Cars built between 1/1/1972 and 31/12/1976 that are no longer eligible for current competition.

**Period Defined Vehicles (Rally)**

Historic Category 1 – Cars first registered before 1/1/1968 that comply with K 22.14 or K 37.10.1.

Historic Category 2 – Cars first registered between 1/1/1968 and 31/12/1974 that comply with K 22.15 or K 37.10.2.

Historic Category 3 – Cars registered and homologated in Groups 1,2,3 or 4 between 1/1/1975 and 31/12/1981

**Pit Lane.** That part of the track that provides competing vehicles with access to and from the pits.

**Pits.** An area that may be provided by the organisers for competitors and their authorised personnel, for the purpose of servicing competing vehicles, in accordance with the SRs, and that has direct access to the Pit Lane.

**Ports.** Openings and passages in components forming or housing the combustion chambers and/or cylinders through which ingoing and exhaust gases pass.

**Practice.** That part of an event intended to enable a competitor to familiarise himself with the course. In certain events, performance during practice may be used by the organisers to determine starting order or position. Practice is subject to all the regulations governing the event.

**Practising/Training Event.** An event organised for the purpose of enabling drivers to gain experience of their vehicles. To qualify as a practising/training event there must be no element of competition, no awards, times may be recorded but not published and cars may not be started simultaneously. There may be no revenue other than from entry fees.

**Production Car.** Any car complying with the definition of a Touring car or any car that is or has been on general catalogued sale, and available from stock through normal retail dealer outlets in the UK (Standard Car).

**Production Kit Car.** A minimum of ten identical cars must have been constructed within a twelve month period. The following items must be identical on all ten cars, wheelbase, track, engine type and specification, weight at front and rear wheels, body shape and material, wheel diameter, wheel rim width. (dimensions subject to normal manufacturers' (i.e. homologation) tolerances).

**Production Car Autotest.** An Autotest event restricted to strictly production cars as defined in the Specific Regulations, intended to encourage newcomers to the sport.

**Production Car Trial.** A 'Sporting Trial' confined to vehicles of a production type over a course that is suitable to test equally the capabilities of cars of all sizes.

**Programme.** A document prepared by the Organisers of a meeting for the purpose of informing the participants and spectators about such meeting.

**Promoter.** Any person or body financially responsible for a competition. The organisation shall be the responsibility of an Organising Club.

**Protest.** A protest is a formal complaint, lodged within specified time limits, by an entrant or competitor, about an act or omission by another competitor, or about the eligibility of another vehicle prior to scrutineering, or where the alleged ineligibility occurs after scrutineering, or is not readily apparent. [O 5]

**Pump Fuel**

(a) Petrol: Motor Gasoline of the type on sale to the general public from UK roadside filling stations: BS4040 (leaded) subject to possession of a valid permit for use, LRG (unleaded) in lieu of a BS or EN standard (TBA), BS EN 228 (unleaded) and BS7800 (super-unleaded).

Petrol is a product refined from crude oil that contains a large number of identifiable compounds that can typically be 250 in number. These compounds can be identified and compared to the available petrol from major oil companies and suppliers.

Unless otherwise stated or the distinction is made between leaded and unleaded petrol, the motor gasoline fuel shall meet the following:

Acceptance levels for Octane Numbers will be determined at 95% confidence level. Only additives to this Motor Gasoline Fuel solely for the purpose of lead replacement are allowed.

Lead Replacement Gasolene (LRG, also known as LRP): Only additives from Sodium, Phosphorous, Potassium or Manganese according to manufacturers' recommendations are allowed.

Note manganese can enhance octane values in any petrol. Under no circumstances will values in excess of 0.005 gms/litre be permitted.

Lead in excess of EU Directive 98/70 EC requirements is illegal. This also applies to 'Free Fuel'.

(b) LPG. (Liquefied Petroleum Gas) which is of 99% wt. min. hydrocarbon composition and that is entirely gaseous at atmospheric temperature and pressure.

(c) Diesel Automotive Gas Oil (DERV) on general sale to the public at roadside filling stations in the UK, complying with BS EN 590 and EU Directive 98/70 EC.

The MSA reserves the right to amend these details to reflect any change occurring in the quality of fuel on general sale to the public in the UK.

**Race.** A competition where two or more cars are started simultaneously from the same starting line and over the same course, and in which the winner is the competitor who first completes a specified distance including any handicap credit, or who completes the greatest distance in a specified time.

**Racing Car.** A vehicle not capable of seating more than the driver, without mudguards, starter, or lighting equipment, unless period defined or otherwise stated.

**Radiator.** For cooling engine coolants or lubricants (cooler). NOT a tank or reservoir.

**Rally.** A competition that may utilise the Public Highway and where there is an imposed average speed for competitors, but which does not meet the requirements of a Classic Reliability Trial, Navigational Scatter event, Treasure Hunt or Road Safety Rally. The greatest speed must never form a factor for the classification.

**Intertek Caleb Brett**

**M-Scan**

**ITS Testing Services (UK) Ltd., Caleb Brett and M-Scan Ltd.** have for many years pooled their resources to provide an internationally approved fuel testing and analysis service. Physical parameters are measured by **ITS** using a wide range of standard methods; detailed fuel composition is determined by **M-Scan**. The combined **ITS/M-Scan** service is used routinely for both racing fuel compliance testing and trackside fuel monitoring in many classes of motor sport up to and including *Formula 1*. Diesel fuel analysis and lubricant condition monitoring are also conducted.

**ITS Testing Services**

*Contact:* Mike Smith  
*Tel:* +44 (0) 1708 680200  
*Fax:* +44 (0) 1708 680264  
*e-mail:* msmith@caleb-brett.com  
 www.itscb.com

**M-Scan Ltd**

James Turner  
 +44 (0) 118 989 6940  
 +44 (0) 118 989 6941  
 services.ltd@m-scan.com  
 www.m-scan.com

## PUMP FUEL – MOTOR GASOLINE

	<b>BSEN228</b>	<b>BS7800</b>	<b>Test</b>
MON (max)	89.0	89.0	ASTM D2700/86
MON (min)	85.0	86.0	ASTM D2700/86
RON (max)	100.0	100.0	ASTM D2699/86
RON (min)	95.0	97.0	ASTM D2699/86
Lead (max) g/l	0.005	0.005	ASTM D3237
Density 15° g/ml	0.720–0.775	0.720–0.775	ASTM D1298/D4052
Oxygen % (max)	2.7% w/w	2.7% w/w	Elemental
Nitrogen % (max)	0.1% w/w	0.1% w/w	ASTM D4629/IP379
Benzene % (max)	1.0% v/v	1.0% v/v	EN 238
Sulphur	150 mg/kg	150 mg/kg	EN ISO 14596/ASTM D2622
Olefins*	18% v/v	18% v/v	ASTM D1319
Aromatics*	42% v/v	42% v/v	ASTM D1319
	<b>BS4040 (Leaded)</b>	<b>LRG (Unleaded)</b>	<b>Test</b>
MON (max)	89.0	89.0	ASTM D2700/86
MON (min)	86.0	86.0	ASTM D2700/86
RON (max)	100.0	100.0	ASTM D2699/86
RON (min)	97.0	97.0	ASTM D2699/86
Lead (max) g/l	0.15	–	ASTM D3341/IP362
Lead (max) g/l	–	0.005	ASTM D3237/D3341/IP362
Density 15° g/ml	0.720–0.775	0.720–0.775	ASTM D1298/D4052
Oxygen % (max)	2.7% w/w	2.7% w/w	Elemental
Nitrogen % (max)	0.1% w/w	0.1% w/w	ASTM D4629/IP379
Benzene % (max)	1.0% v/v	1.0% v/v	EN 238
Sulphur	150 mg/kg	150 mg/kg	EN ISO 14596/ASTM 02622
Olefins*	18% v/v	18% v/v	ASTM D1319
Aromatics*	42% v/v	42% v/v	ASTM D1319

\*Note: Olefins and Aromatics values are expressed as a percentage of total fuel

All motoring events utilising the Public Highway in England, Scotland or Wales are subject to Motor Vehicles (Competitions and Trials) Regulations.

A Rally will comply with at least one of the following categories and must meet the organisational requirements laid down by the MSA. The Regulations must clearly indicate the category of Rally that is being organised.

- (a) **Economy Rally.** Designed to assess the fuel economy of competitors' cars and in which the overall results are based on the relative fuel consumption of these cars.
- (b) **Navigational Rally.** A Rally designed to test the navigational skill of the crew.
- (c) **Road Rally.** A Rally in which the competition on the Public Highway does not qualify for an alternative category and in which marking for maintaining a time schedule forms a substantial part of the competition.
- (d) **Multi-use Stage Rally.** A Special Stage Rally that uses parts of stages more than four times.
- (e) **Special Stage Rally.** A Rally containing Special Stages joined by linking sections that may utilise the Public Highway.
- (f) **Twelve Car Rally.** A Rally complying with one of the above categories that falls within the provisions of automatic authorisation under the Motor Vehicles (Competitions and Trials) Regulations (where applicable). The category must be indicated in the title of the event (i.e. Economy Twelve Car Rally, etc.).
- (g) **Vintage Rally (or Run).** A Rally complying with one of the above categories and restricted to vehicles built prior to 1st January 1941 (including Post-Vintage). The category must be indicated in the title of the event (i.e. Vintage Twelve Car Rally, etc.).
- (h) **Veteran Rally (or Run).** A Rally or Run restricted to vehicles built before 1st January 1919.
- (i) **Historic Special Stage Rally.** As (e) above, but participation is limited to cars complying with the appropriate Technical Regulations for Historic or Post-Historic Special Stage Rally Vehicles.
- (j) **Historic Road Rally.** As (c) above, but participation is limited to cars complying with the appropriate Technical Regulations for Historic or Post-Historic Road Rally Vehicles.
- (k) **Endurance Road Rally.** A Road Rally where a substantial proportion of the competition takes place on the highway, timed to the minute, and which shall also include Special Tests on private property which may be timed to the second.

#### (l) **Trophy Rally**

A supplementary event to a main rally, which may be provided by Organiser's to permit competitors who retire from the main event, the opportunity to have further competition. Vehicles must be re-scrutineered for conformity. Competition may only commence at a pre-determined time during the event. These competitors may run behind the main event or be re-introduced into their original seeded position, at the Clerk of the Course's discretion.

Results should be displayed and awards may be presented.

The intention to promote a Trophy Rally must be included within the published event regulations.

#### (m) **Practice/Training Rally**

A Practice Event may be promoted as a supplementary event, to permit competitors who retire from the main event, the opportunity to gain further experience of their vehicles.

The intention to provide a Practice Event must be included within the published event regulations

Vehicles must be re-scrutineered for conformity. Competition may only commence at a pre-determined time during the event. These competitors may run behind the main event or be re-introduced into their original seeded position, at the Clerk of the Course's discretion.

There will be no results or awards.

**Rallycross.** A timed event with several cars starting simultaneously that takes place on a closed circuit with a combination of sealed and unsealed surfaces.

**Rallysprint.** A title reserved for special events run with the specific approval of the MSA that can only take place at MSA licensed venues.

**Recognised Group.** A club, or association, that does not have individual members, but consists of a number of independent clubs, registers or associations, that need not, themselves, be Recognised Organising Clubs.

**Record.** The best result obtained under the prescribed conditions.

**Registered Member of a Club.** Any Member of a Club, other than an Honorary Member, who has been duly elected and accepted for membership for at least 12 months or the balance of the Club's current membership year. Any form of membership that permits the holder to compete in club events, must also entitle such a member to be present at General Meetings of the Club.

**Regional Association.** An Association of Organising Clubs that has been formed by and on behalf of the MSC.

**Restrictor.** Any device with stated orifice and minimum thickness 3mm of non-porous material, imposed or inserted in an inlet tract for the purpose of controlling the passage of air/fuel mixture into the induction system and/or combustion chamber.

**Road Book or Route Card.** A document supplied to competitors instructing them how to proceed from one point to another, and containing such information as to the controls and checks that they are to visit during the event, how they will establish that they have visited checks not manned by officials, details of tests, etc.

**Road Safety Rally.** An event organised with the intention of promoting Road Safety and falls within the provisions of automatic authorisation under the Motor Vehicles (Competitions and Trials) Regulations (where applicable). Such events may qualify for an exemption of permit.

**Road Section.** Any section of the route of a Special Stage Rally (excluding control and service areas) whether on the public highway or not that links Special Stages.

**Saloon Car.** A vehicle equipped to seat at least four normal size adults in comfort, fitted with a non-detachable roof integral with the body, and having a windscreen, side and rear windows. The door windows must be integral with the doors and must be equipped with close fitting safety glass or plastic. Drophead or convertible coachwork if permanently attached to the main bodywork, falls within the definition of a saloon car and must be erected whilst in competition.

**Scheduled Speed.** The average speed calculated from the time allowed to competitors to cover a certain distance. In the case of highways this distance shall be that determined from 1:50,000 Ordnance Survey maps (or equivalent local maps) along the route specified by the organisers, or if no route is specified by the shortest route.

**Section.** That portion of the route of a competition between two controls, or that portion of a route of a competition to which specific requirements apply, e.g.:

(a) **Standard Section.** Any section of a Rally where a penalty is imposed for late arrival or arrival before Scheduled Time.

(b) **Neutral Section.** Any section of a Rally where the organiser must impose an early arrival penalty and, where applicable, a maximum lateness penalty and where a competitor is supplied with supplementary information by the organiser that requires the crew to observe special restrictions as to their driving behaviour and being a section where a competitor may not make up time.

(c) **Observed Section.** A section of a Trial that has to be traversed non-stop to avoid penalty.

(d) **Regularity Section.** A section of a rally in which competitors are required at all times to adhere to a set speed and in which adherence to that speed may be checked at intervals during the section. The start and finish must be clearly defined.

(e) **Transport Section.** Any section of a rally, being at least 4 miles in length, where no penalty is applied for early arrival, other than in accordance with K 17.7, but where applicable, a maximum lateness penalty can be applied. A section whose sole purpose is to transport competitors between other types of section.

**Servicing.** Work carried out on the car by any person, other than the competing crew, or the use of any part or tools not carried in the competing car.

**Shortest Route.** The shortest route between two points using only public highways, unless specific permission has been obtained for the use of private property and all competitors so informed.

**Silhouette.** The outline of the original body shape, in the side and plan view, of the vehicle above a line drawn through the front and rear hubs.

#### Single Seater

(a) The construction of the vehicle must be symmetrical, i.e. when the vehicle is lifted laterally and weighed without the driver, the half weight on either side must be equal to half the overall weight 5%.

(b) It must be possible to enter or leave the driver's seat without it being necessary to remove or detach any part of the vehicle, other than the steering wheel or seat belts/harness.

(c) The driver, sitting in the driving position, must face forward.

**Spare Wheel.** A wheel with tyre suitable to be used as a direct replacement for one in use on the vehicle.

**Special.** A vehicle with two or more seats, unavailable through retail outlets or as a series production vehicle.

**Special Stage.** A section of a Rally, on roads or land for which the event has exclusive access, or on public roads closed by Government legislation specifically permitting closure for motor sporting purposes, where the marking for maintaining a time schedule forms a part of the competition.

**Special Test.** A test, permitted only in road rallies other than those with any standard sections timed to an accuracy of less than a minute, which takes place off the public highway in which a competitor is required to perform a manoeuvre or series of manoeuvres set by the organisers. If timed, the competitor shall not be required to exceed an average speed of 30mph or 40mph for Endurance Road Rallies. No benefit shall accrue to any competitor exceeding the set average speed.

**Speed Event.** An event in which cars run individually, even though two or more individual runs may be taking place concurrently, over a course exceeding 200m in length and in which the relative performance of the competitors is assessed by timing them over a given distance and the winner, or the most meritorious performer, is the competitor who covers the distance in the least time. The term 'Speed Event' will include hill climbs, sprints, slaloms, drag races, autocross and other similar events.

**Spoiler.** Any device (splitter, trim tab, etc.) other than an aerofoil, fixed as an extra to a vehicle to divert airflow to create an aerodynamic advantage.

**Sponsor.** A person or body making a contribution, financially or in kind, towards the promotion of a competition, or of a competitor.

**Sporting Trial.** A trial in which the marking during the event is mainly based upon ability to climb hills or traverse difficult sections and in which the distance upon a highway does not exceed 50 miles.

**Sports Car.** A production vehicle equipped with two or more seats and not necessarily with roof or hood (not a saloon).

**Sports Racing Car.** A two seater competition vehicle designed and built specifically for racing on closed circuits, without quantity manufacturing requirements but excluding one make sports car formulae.

**Standard Car Trial.** A 'Sporting Trial' designed for newcomers to the sport and restricted to mass produced production cars as defined in the Specific Regulations.

**Start.** The start is the moment when the order to start is given to a competitor or competitors, or when a competitor crosses the starting line actuating automatic timing equipment.

**Starting Line.** A starting line is the first control line on a course.

**Supplementary Regulations (SRs).** Compulsory document issued by the Organisers of a competition with the object of laying down the details of that competition.

**Suspension.** A person or body shall be said to be suspended when he has for a certain period been forbidden to take part in any competition.

**Suspension (Vehicle)** The system(s) by which sprung movement is provided between the main chassis structure and the road wheels.

Suspension will be deemed to consist of all the partly sprung components that move relative to the main chassis structure for the purpose of making connection between it and the entirely unsprung parts but not including components exclusively concerned with steering, braking and power transmission.

(a) Suspension mounting: the member or component attached to the chassis on which the moving element(s) of the suspension is mounted.

(b) Suspension mounting points – the point(s) on the chassis and the mounting that forms the centres of attachment to the chassis.

(c) Suspension locating point – the point in the mounting about which the suspension articulates.

(d) Suspension bush – considered in relation to a suspension mounting or another suspension member it may have one of two forms:

(i) a lining of an external element that rubs directly upon an inner element,

(ii) a pre-manufactured and catalogued unit within which all articulation is provided.

(e) Suspension bush housing – the aperture in the suspension member that supports and locates the suspension bush. In the case of the MacPherson strut top mountings the bush housing is considered to be the suspension mounting.

(f) Sprung suspension – a suspension system with the weight of the car supported by discrete springing media none of which may come within the definition of a 'Temporary Part'. Flexible mounting bushes are unacceptable as springing media.

**Telemetry.** Telemetry is the means of transfer of information and/or data from a data source to a data receiver without a cable. In motor sport applications, the term telemetry usually refers to "uni-directional" transfer of data to the pits whilst the vehicle is on the circuit, without any acknowledgement signal being transmitted by the pit based equipment. "Bi-directional" telemetry, which describes and facilitates full transfer of data in both directions, is currently only permitted in Formula 1. For karting applications, radio telemetry is not permitted for any purpose.

**Temporary Part.** A part that differs in type or material from that normally used on Standard Production cars or that which has a short useful life expectancy.

**Test.** A competition held on private ground, in which a competitor is required to complete a manoeuvre, or series thereof, as laid down by the relevant instructions (see also Autotest).

**Time Card.** A document upon which the time of a competitor's arrival at or departure from a Control is recorded. A time card may or may not be incorporated in a Road Book or Route Card.

**Touring Assembly.** An event organised with the primary object of assembling tourists at a point settled beforehand. In a Touring Assembly a prescribed route may have to be followed. Pre-arranged points may be provided for in the event's itinerary but no limits of speed may be laid down, nor any requirement to visit

pre-arranged points, other than a requirement to report at a final point not later than a specified time. The programme of a Touring Assembly may include additional events (other than speed) provided that they are held only at the place of final assembly. No prize money may be allocated in respect of Touring Assemblies.

A Touring Assembly may not give awards of any description, other than those in relation to activities arranged at the finishing point.

The Regulations for the event must be clearly endorsed 'Touring Assembly'. Notwithstanding anything in these Regulations, a Touring Assembly shall be exempt from the general requirements provided:

(a) The consent in writing of the MSA and its approval of the regulations for the Touring Assembly have first been obtained, and  
(b) Where the route runs through the territory of an ASN other than the MSA, K 1.5. of these Regulations has been complied with.

**Touring Car.** Vehicles produced in large series production quantities offering at least four seats (two seats if under 1,000cc capacity).

**Track (other than a Special Stage).** That part of a course that may have a sealed or unsealed surface, that is designated to be used by competitors. Its boundary may be the edge between its surface and the adjoining ground or a dotted or continuous painted line on a sealed surface, or as indicated by markers.

**Track Licence.** The written approval of a track by the FIA or the CIK-FIA (International Track Licence) or by the MSA (National Track Licence).

**Treasure Hunt.** An event involving the solving of certain problems in which the use of a car is merely incidental as a means of transport and the skill or experience of a driver plays no part. If the event utilises the Public Highway, it shall be run in accordance with the Motor Vehicles (Competition and Trials) Regulations. Such events may qualify for an exemption of permit.

**Trial.** A number of tests on private ground with the object of bringing the car to an involuntary stop.

**Trucks.** Two axle or three axle tractor units.

**Venue.** The whole area or areas used for an event under the control of the organising club and/or venue owner(s).

**Voice Radios.** For karting applications, the driver is not permitted any radio based voice communications.

**Windscreen.** A transparent shield located in front of vehicle occupants to protect from the wind and airborne particles. The requirement can be waived for single seater and open sports cars.

**World Record.** A record recognised by the FIA as the best performance irrespective of class.

CONVERSION TABLES

Distance	Temperatures		
1 mile = 1760 yards 1 kilometre = 1000 m 1 yard = 3 ft 1 metre = 100 cm 1 foot = 12 in 1 centimetre = 10 mm 1 inch = 2.54 cm 1 foot = 30.48 cm 1 yard = 91.44 cm 1 mile = 1.609344 km 1 millimetre = 0.03937 in 1 centimetre = 0.3937 in 1 metre = 39.37 in 1 kilometre = 0.62137 miles	Celsius	=	Fahrenheit
	-5	=	23
	0	=	32
	5	=	41
	10	=	50
	15	=	59
	20	=	68
	25	=	77
	30	=	86
	Speed		
	KPH	=	MPH
	50	=	31
	80	=	50
	100	=	62
	150	=	93
	200	=	124
	MPH	=	KPH
	25	=	40
	50	=	80
	70	=	112
	100	=	161
	150	=	241
	Fluid weights		
	Water	10 lbs per gallon	1.0 kg per litre
	Petrol	7.4 lbs per gallon	0.74 kg per litre
	Diesel	8.3 lbs per gallon	0.83 kg per litre
	LPG	5.2 lbs per gallon	0.52 kg per litre
	Pressures		
	atu	=	psi
	0.25	=	3.56
	0.50	=	7.11
	1.00	=	14.23
	2.00	=	28.46
	5.00	=	71.15
	Power		
	Horsepower:	1hp(ps) =	745.7kw
		1kw =	1.341hp(ps)
	Torque:	1ft lb =	1.3559 Nm
		1Nm =	0.7375ft lb
Weight			
1 ton = 2240 lbs 1 tonne = 1000 kg 1 stone = 14 lbs 1 kilogram = 1000 gr 1 pound = 16 oz 1 ounce = 28.35 gr 1 pound = 454 gr 1 stone = 6350 gr 1 ton = 1016.05 kg 1 gram = 15.43 grains 1 kilogram = 2.205 lbs 1 zentner = 110.23 lbs 1 tonne = 0.984 ton			
Fluid			
1 gallon = 4 qts 1 litre = 10 dl 1 quart = 2 pints 1 litre = 1000 ccs 1 pint = 20 fl ounces 1 cc = 1 ml 1 fl ounce = 0.028 l 1 pint = 0.568 l 1 quart = 1.136 l 1 gallon = 4.546 l 1 cc = 0.061 cu ins 1 litre = 61.026 cu ins 1 litre = 1.760 pints 1 litre = 0.22 galls			
Distance per Capacity			
1 mile per litre = 4.5 mpg 1 km per litre = 2.824 mpg 100 km per litre = 282.4 mpg			