

EFRA ANNUAL SECTION MEETING

6-7th of November 2021

Combined Agenda 1:8 IC and 1/10th IC Track

SATURDAY 6th of November 2021.

1. CHAIRMAN'S WELCOME

Mr Javier Garcia - Mrs Julie Thurston

The Chairmen opened the meeting at

2. APOLOGIES FOR ABSENCE

Apologies have been received from:

COUNTRY	PRESENT	SECTI ON SUBSC	EC 1/8	EC 1/10	WC 1/10	EC 40+ 1/8	EC +40 1/10th	WC GT8	EC GT8
		R							
AUSTRIA									
BELARUS									
BELGIUM									
BULGARIA									
CROATIA									
CZECH REP.									
DENMARK									
ESTONIA									
FINLAND									
FRANCE									
GERMANY									
GREAT BRITAIN									
GREECE									
HUNGARY									
IRELAND									
ITALY									
LUXEMBOURG									
MONACO									
NETHERLANDS									
NORWAY									
POLAND									
PORTUGAL									
RUSSIA									
SLOVAK REP.									
SLOVENIA									
SPAIN									
SWEDEN									
SWITZERLAND									
TURKEY									

TOTAL					

Allocations can be changed till January 21th 2022.

Other persons present:

3. MINUTES OF 2020 SECTION MEETING

November 2020— Virtual AGM

Matters arising from the minutes:.

The minutes were accepted as written at the AGM 2020.

The following person was elected to check the minutes of this year:

4. CORRESPONDENCE RECEIVED

Any correspondences from the 2021 season.....

5. CHAIRMAN'S REPORT

A full report of the Season is presented by Section Chairmen.

6 EC AND GP'S 2022/23

No applications: All the already elected events are moving up one year.

Provisional Race calendar for 1/8th IC Track 2022

Year/Date	Alt. Date	Status	Country	Venue
2022	1 rd – 3 ^h April	GP Series	Italy	Leno
2022	13 nd – 15 th May	GP Series	Netherlands	Rucphen
2022	13 nd – 18 th June	EC GT 1/8	Switzerland	Lostallo
2022	1 rd – 6 th August	EC	Spain	Almussafes(Valencia)
2022	TBC	International	Netherlands	Heemstede EFRA Classic Races
		Race		3 hours of Heemstede

Future Race calendar for 1/8th IC Track.

Year/Date	Alt. Date	Status	Country	Venue
2023		EC	Portugal	Vilareal
2023		EC 40+	Switzerland	Lostallo
2023		GT8	Croatia	Zagreb

Provisional Race calendar for 1/10th IC Track 2022

Year/Date	Alt. Date	Status	Country	Venue
2022	01 rd – 03 ^h April	GP Series	Italy	Leno
2022	13 nd – 15 th May	GP Series	Netherlands	Rucphen
2022	04 th – 09 th July	EC	Italy	Gubbio
2022	TBC	International Race	Netherlands	Heemstede EFRA Classic Races 3 hours of Heemstede
2022	12 th – 17 th September	EC 40+	Netherlands	Utrecht
2022	TBC	WC Date to be confirmed	Thailand	Bangkok

Future Race calendar for 1/10th IC Track

Year/Date	Alt. Date	Status	Country	Venue
2023		EC	Italy	Messina
2023		EC40+	Switzerland	Lostallo

7. ALLOCATIONS

Allocations were made to each country as printed in the table form under item 2 on the agenda.

All Federations MUST confirm their FINAL Allocation Numbers for each event to the relevant Section Chairman by 21th. January LATEST

8. RULE PROPOSALS 1/8 and 1/10 IC TRACK

Note: The EFRA Committee has studied all received proposals and has come to an opinion over each one, The EFRA Section Chairman will inform the floor of such positions.

Current Rule

5.2.

Voted for 2019: Fuel may only contain methanol (methyl alcohol, CAS number 67-56-1), lubricating oil, a small content of anti-corrosion chemicals and maximum 16% for 1/8 and 16% for 1/10 of nitro methane (Cas number 75-52-5) in volume. The specific gravity of the mixture may not be heavier than 0.87 grams/cc at 20C and standard atmospheric pressure. For quick testing a Nitromax 16 can be used, but in case of failure with the Nitromax an official density meter must be used to control the specific gravity of the fuel including the temperature recorded during the test. A specific table will be produced to report the density (grm/cc) based on the temperature (from 0 to 50C). The tolerance on the measurement will be +/- 0.5% based on the data reported in density table. Any violation with fuel which means any proof of the use of other additives as mentioned will mean 5 years of disqualification from any EFRA and IFMAR event.

Proposal

5.2.

Fuel may only contain methanol (methyl alcohol, CAS number 67-56-1), lubricating oil, a small content of anticorrosion chemicals and maximum 16% for 1/8 and 16% for 1/10 of nitro methane (Cas number 75-52-5) IN
WEIGHT (not in volume). The specific gravity of the mixture may not be heavier than 0.859 grams/cc at 20°C and
standard atmospheric pressure. For quick testing a Nitromax 16EU can be used, but in case of failure with the
Nitromax an official density meter must be used to control the specific gravity of the fuel including the temperature
recorded during the test. A specific table will be produced to report the density (grm/cc) based on the temperature
(from 0 to 50°C). The tolerance on the measurement will be +/- 0.5% based on the data reported in density table.
Any violation with fuel which means any proof of the use of other additives as mentioned will mean 5 years of
disqualification from any EFRA and IFMAR event. From 1st of January 2023 the fuel of the EFRA events must be
EFRA Homologated.

Remarks

The new EU rule is 16 % in WEIGHT so that a new standard must be set and a new Nitromax device will be needed. Fuel homologation can take place from Jan 2023

Proposed by: EFRA, Gomez Ambrosio Carlos

Proposal Status:

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Seconded by: ............ o Not Seconded The proposal: o Passed Unanimously o Passed with .... for, .... against and .... abstentions. o Rejected with .... for, .... against and .... abstentions. o Amended
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Current Rule

5.2.

Voted for 2019: Fuel may only contain methanol (methyl alcohol, CAS number 67-56-1), lubricating oil, a small content of anti-corrosion chemicals and maximum 16% for 1/8 and 16% for 1/10 of nitro methane (Cas number 75-52-5) in volume. The specific gravity of the mixture may not be heavier than 0.87 grams/cc at 20C and standard atmospheric pressure. For quick testing a Nitromax 16 can be used, but in case of failure with the Nitromax an official density meter must be used to control the specific gravity of the fuel including the temperature recorded during the test. A specific table will be produced to report the density (grm/cc) based on the temperature (from 0 to 50C). The tolerance on the measurement will be +/- 0.5% based on the data reported in density table. Any violation with fuel which means any proof of the use of other additives as mentioned will mean 5 years of disqualification from any EFRA and IFMAR event.

Proposal

52

Fuel may only contain methanol (methyl alcohol) CAS number 67-56-1), lubricating oil, a small content of anticorrosion chemicals and maximum 16% of nitro methane (Cas number 75-52-5) IN WEIGHT (not in volume). The specific gravity of the mixture may not be heavier than 0.859 grams/cc at 20°C and standard atmospheric pressure. For quick testing a Nitromax 16EU can be used, but in case of failure with the Nitromax an official density meter must be used to control the specific gravity of the fuel including the temperature recorded during the test. A specific table will be produced to report the density (gr/cc) based on the temperature (from 0 to 50°C) The tolerance on the measurement will be +/- 0.5% based on the data reported in density table. Any violation with fuel which means any proof of the use of other additives as mentioned will mean 5 years of disqualification from any EFRA and IFMAR event. If an EFRA World Championship Event is to be run at a Country which permits the use of a heavier content of nitro methane (up to 25% in volume) and the Organizer can ensure EFRA and the participants its supply track side, then the limits will be according to the IFMAR with a maximum 25% of nitro methane (Cas number 75-52-5) in volume, using for quick testing the corresponding Nitromax tool. From 1st of Jaunary 2023 the fuel of the EFRA events must be EFRA Homologated.

Remarks

Fuel Homologation ready, if needed, for 2023. The possibility to host IFMAR worlds with IFMAR Standard fuels.

Proposed by: EFRA, Gomez Ambrosio Carlos

Proposal Status:

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Seconded by: ............ o Not Seconded
The proposal: o Passed Unanimously o Passed with .... for, .... against and .... abstentions.
o Rejected with .... for, .... against and .... abstentions. o Amended
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Current Rule

10.1

GT Technical rules

The chassis must have a minimum kick-off 5 degrees in front . No carbon fibre chassis allowed.

The kick-off needs to have a minimum length of 30mm and lower suspension arms must be mounted on the kick-off

Kick off must start at a reference point from the middle point of the gearbox(or main gear), min 100mm, max 230mm.

Drive shafts must be used all around .

Brake System: Maximum 2 brake system in Central Drive Shaft / Central braking only on crown wheel (spur gear) . Only standard mechanical brakes are permitted . Up to two brake discs are permitted anywhere on the centre driveshafts . Brakes may not be located on the outboard axles .

One-ways, spools, locking "Torsion-type," or externally adjustable differentials are not permitted . Front & Rear geared Differentials can only be tuned with the use of silicone-based oils . No centre differential allowed . Ball differentials not allowed/only gear differentials . Front and Rear differential gear ratios must be identical . Front or rear underdrive or overdrive is not permitted . The final drive ratio front and rear must be the same .

Overall dimensions of the chassis:

Height: minimum height 155 .0mm with chassis plate on 20mm blocks .

Wheel base between 320-379mm

Length Maximum: 590mm

Width max 310 .0mm, including wheels, axles and wheel-nuts.

The front of the car must be equipped with a bumper made from flexible 'foam' material with all corners and edges rounded off . The contour of the bumper will follow the contour of the body . The bumper may not protrude in front of the body . Minimum dimensions 200 x 20mm.

The maximum capacity for the fuel tank is150cc max, including all internal tubing The Clutch must be a centrifugal type with a maximum of 4 shoes. No axial engagement of the shoes (No "Centax" Type clutches) .Clutch must use radial centrifugal shoes only in conjunction with Std parallel sided cylindrical clutch bell similar design to the unit shown

Direct Drive, i .e . single speed or maximum two speed gear box Minimum weight in order to run with empty tank is 3500 grams.

Proposal

GT Technical rules

The chassis must have a minimum kick-up 5 degrees in front. No carbon fibre chassis allowed.

The kick-up needs to have a minimum length of 30mm and lower suspension arms must be mounted on the kick-off.

Kick-up must start at a reference point from the middle point of the gearbox(or main gear), min 100mm, max 230mm.

Drive shafts must be used all around All driveshaft must be made in steel (not lightweight materials like Aluminium or Titanium).

Brake System: Maximum 2 brake system in Central Drive Shaft / Central braking only on crown wheel (spur gear). Only standard mechanical brakes are permitted . Up to two brake discs are permitted anywhere on the centre driveshafts. Brakes may not be located on the outboard axles.

One-ways, spools, locking "Torsion-type," or externally adjustable differentials are not permitted. Front & Rear geared Differentials can only be tuned with the use of silicone-based oils. No centre differential allowed. Ball differentials not allowed/only gear differentials. Front and Rear differential gear ratios must be identical. Front or rear underdrive or overdrive is not permitted. The rear differential must be "finger proof", so it must be at least partly covered in case of an open differential.

The final drive ratio front and rear must be the same.

Overall dimensions of the chassis:

Height: minimum height 155 .0mm with chassis plate on 20mm blocks .

Wheel base between 320-379mm

Length Maximum: 590mm

Width max 310.0mm, including wheels, axles and wheel-nuts.

The front of the car must be equipped with a bumper made from flexible 'foam' material with all corners and edges rounded off. The contour of the bumper will follow the contour of the body. The bumper may not protrude in front of the body. Minimum dimensions 200 x 20mm.

The maximum capacity for the fuel tank is150cc max, including all internal tubing The Clutch must be a centrifugal type with a maximum of 4 shoes. No axial engagement of the shoes (No "Centax" Type clutches). Clutch must use radial centrifugal shoes only in conjunction with Std parallel sided cylindrical clutch bell similar design to the unit shown.

Direct Drive, i.e. single speed or maximum two speed gear box Minimum weight in order to run with empty tank is 3500 grams.

Remarks

Update IFMAR rules in last version August 2021

Proposed by: EFRA, Garcia Collado Javier

Proposal Status:

Seconded by: o Not Seconded

The proposal: o Passed Unanimously o Passed with for, against and abstentions.

o Rejected with for, against and abstentions. o Amended

Current Rule

10.2

Engine rules

Engines allowed will be .21 or 3 .5cc engines . Maximum carburettor diameter is 7mm . The motor shall be air cooled. Conical plugs allowed.

Number of Ports. For EFRA European Championships we propose the following number of ports: 3 Outlet ports, consisting of 1 (one) main Outlet port and 2 outlet booster ports, regardless the name and dimensions, every hole is to be considered as one of the 3 allowed.

A maximum of 5 inlet ports or booster ports . Any hole will be considered as one of the 5 allowed.

The INS box is mandatory.

Engines must be capable of running a heat of minimum 7 minutes on one tank of 150cc fuel to avoid excessive tuning. Exhaust port height max opening to be determined in the future.

Approved / registrated or homologated 3 chamber mufflers according to the EFRA list, including INS box list. A pipe extension on the muffler tailpipe is allowed with the provision below. Any extension to the exhaust pipe or addition to the body or attached to the chassis to capture or direct oil residue from the exhaust outlet must not increase the DB levels, as determined by race management.

Proposal

Engine rules

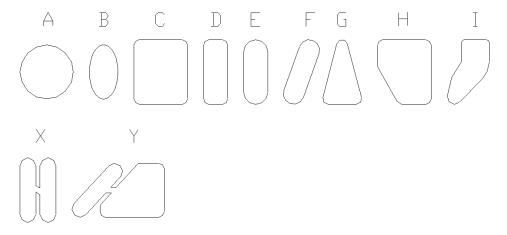
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Number of Ports. For EFRA European Championships we propose the following number of ports: 3 Outlet ports, consisting of 1 (one) main Outlet port and 2 outlet booster ports, regardless the name and dimensions, every hole is to be considered as one of the 3 allowed.

A maximum of 5 inlet ports or booster ports. Any hole will be considered as one of the 5 allowed.

The definition of 'port' is a hole in the cylinder liner for fuel inlet or exhaust extraction. The inlet and exhaust holes/ports can be any regular recognised shape, eg. Circle, Ellipse, Square, Rectangle, Triangle, Pentagon etc., or Polygon shapes that are recognised as not being regular shapes joined with a 'slot' or hole. Corners and ends of any shape can be radiused and any individual side does not have to be a straight line.

Examples:- Shapes A to I are allowed. Shapes X and Y are not allowed. See Drawing:



The INS box is mandatory.

Engines must be capable of running a heat of minimum 7 minutes on one tank of 150cc fuel to avoid excessive tuning. Exhaust port height max opening to be determined in the future.

Approved / registrated or homologated 3 chamber mufflers according to the EFRA list, including INS box list. A pipe extension on the muffler tailpipe is allowed with the provision below. It is not allowed to use some kind of trumpet to direct the exhaust fumes outside for muffler outlet pipe, they make too much noise. Using a rubber

stinger on the outlet pipe is OK, as long as the noise is not higher. Definition of Trumpet in this instance: Any addition to the pipe or body that increases the DB level, as determined by race management.

Remarks

During the last year of development of GT class , we found some engines which are based in 9 ports engines instead of 5 port engines based. The only different is that manufacturers are joined ports, creating a "fake" 2-1 ports which is not in the aim of the GT class. Another good reason to change rule is because most of the engine manufactures skip the evolution in 5 ports engine and to concentrate to use 9 ports engines converted in 5 ports. And final reason is with more powerful engines GT means that starting to get problems with durability of the tires and also with fuel consumption so. And this is not the aim of the class. Technical rule

Proposed by: EFRA, Garcia Collado Javier

Proposal Status:

Seconded by: o Not Seconded

The proposal: o Passed Unanimously o Passed with for, against and abstentions. o Rejected with for, against and abstentions. o Amended

Current Rule

10.3

Body Rules

Bodies must be commercially available 1/8th scale GT1, GT2, Super GT, DTM, or V8 Supercar cars, 2 door GT bodies .

At least a body with a separate wing like in touring cars . Height of wing max . 10mm higher as rooftop . Measurement taken with chassis plate on the ground . The roof cannot be designed in such a way that ribs or vins are used to manipulate the height . Maximum width body 317mm . Wing compared to body and wing overhang, same as sedan 1/10th class, max 10mm . Wing can be unpainted/clear .

Wing width max 310 mm, including side plates, but never wider as the rear of the body . Wing chord max 79 mm . Wing endplates maximum $40 \times 70 \text{mm}$.

The body must have visible windows, body panel and trim markings, and the windows must be mostly clear . Some intrusion for creative painting purposes and tinting is permitted, but the windows must be transparent . Bodies must have headlights and grill details .

1 piece body moulding to avoid internal aerodynamics. A diffuser mounted on the rear of the chassis is allowed as long as it stays inside the body and not wider as the inner measurement of the wheels. The diffuser must be made of flexible material without any sharp edges.

No internal body supports / stiffeners / braces allowed to avoid lightweight bodies with internal modifications and add-ons, excluding reinforcement of the wheel arches and back boot lit is allowed . The body must rest on a maximum of 7 posts, of which 5 can protrude outside the bodies . Bodies must be made from Lexan with a minimum thickness of 1mm . The wing must rest on maximum 3 body posts which are not wider as 50x 20 mm each .

The body must be made from an existing car design, for which the name must be mentioned on the request for homologation . After been approved the name of the body is free to avoid license fees etc .

Bodies must be within the GBS dimensions by IFMAR . See drawings below.

- A) Minimum 155,0mm (with chassis on 20mm blocs),
- B) Maximum 15 mm depth
- C) Minimum 170mm
- D) Maximum 3 posts 50mm x 20 mm
- E) Minimum 12,0mm, gap between straight edge bottom and hood plane where it meets windshield .
- F) Maximum 75,0mm (with chassis on 20mm blocs)
- G) Minimum 36mm
- H) Minimum 200mm
- I) Minimum 145mm
- J) Minimum 130mm (top inside edge of C-pillar)
- K) Maximum 8mm depth of A-pillar above the windshield surface plane
- L) Maximum 5mm height of outer roof rail above the roof surface plane
- M) Maximum 4mm stagger between hood and windshield
- N) Maximum 317mm, minimum 300mm overall width

Numbering of the cars . Cars will be numbered 1 to 10 or 1-12 in each heat . The car must have 3 numbers .Only the numbers supplied by EFRA will be used on the cars . They may not be cut out to eliminate the background . 2 Numbers on the sides in front of the rear wheels, 1 in front on the hood or window . These numbers will change during the qualifying heats (after re-seeding).

EFRA will provide other numbers for altered heats and for sub-finals and final .

Holes in the body. Holes in the body for fuel-gun, fuel tank opener, aerial, glow-plug, carburetor access and exhaust. Rear and side windows may be removed. Maximum height of 75mm cut-out at rear on 20mm blocks.

One opening may be made in the front windscreen with a maximum dimension of 80 .0mm in any direction for refueling and/of engine cooling . An additional hole for refueling in the roof of 50mm is allowed and 35mm for the glow plug . Minimum distance between holes is 5mm. An extra hole for ty-rap to open tank in the front windscreen will be allowed, max. 10mm .See drawings

Proposal

Body Rules

Bodies must be commercially available 1/8th scale GT1, GT2, Super GT, DTM, or V8 Supercar cars, 2 door GT hodies

At least a body with a separate wing like in touring cars. Height of wing max . 10mm higher as rooftop . Measurement taken with chassis plate on the ground. The roof cannot be designed in such a way that ribs or fins are used to manipulate the height. The measurement of the height of the car is done on the highest point of the rooftop. Excluding any air intake scoops, ridges or any other extention from the actual true rooftop. Maximum width body 317mm. Wing compared to body and wing overhang, same as sedan 1/10th class, max 20mm. Wing can be unpainted/clear.

Wing width max 310 mm, including side plates, but never wider as the rear of the body . Wing chord max 80 mm . Wing endplates maximum $40 \times 80 \text{mm}$.

The body must be mounted to the sprung mass of the car at front and rear. No mounting on the suspension uprights allowed.

The body must have visible windows, body panel and trim markings, and the windows must be mostly clear . Some intrusion for creative painting purposes and tinting is permitted, but the windows must be transparent . Bodies must have headlights and grill details .

1 piece body moulding to avoid internal aerodynamics . A diffuser mounted on the rear of the chassis is allowed as long as it stays inside the body and not wider as the inner measurement of the wheels . The diffuser must be made of flexible material without any sharp edges .

No internal body supports / stiffeners / braces allowed to avoid lightweight bodies with internal modifications and add-ons, excluding reinforcement of the wheel arches and back boot lit is allowed . The body must rest on a maximum of 7 posts, of which 5 can protrude outside the bodies . Bodies must be made from Lexan with a minimum thickness of 1mm. The wing must rest on maximum 3 body posts which are not wider as 50x 20 mm each.

The body must be made from an existing car design, for which the name must be mentioned on the request for homologation. After been approved the name of the body is free to avoid license fees etc.

Bodies must be within the GBS dimensions by IFMAR . See drawings below.

- A) Minimum 155,0mm (with chassis on 20mm blocs),
- B) Maximum 15 mm depth
- C) Minimum 170mm
- D) Maximum 3 posts 50mm x 20 mm
- E) Minimum 12,0mm, gap between straight edge bottom and hood plane where it meets windshield .
- F) Maximum 75,0mm (with chassis on 20mm blocs)
- G) Minimum 36mm
- H) Minimum 200mm
- I) Minimum 145mm
- J) Minimum 130mm (top inside edge of C-pillar)
- K) Maximum 8mm depth of A-pillar above the windshield surface plane
- L) Maximum 5mm height of outer roof rail above the roof surface plane
- M) Maximum 4mm stagger between hood and windshield
- N) Maximum 317mm, minimum 300mm overall width

Numbering of the cars . Cars will be numbered 1 to 10 or 1-12 in each heat . The car must have 3 numbers .Only the numbers supplied by EFRA will be used on the cars. They may not be cut out to eliminate the background . 2 Numbers on the sides in front of the rear wheels, 1 in front on the hood or window. These numbers will change during the qualifying heats (after re-seeding).

EFRA will provide other numbers for altered heats and for sub-finals and final.

Holes in the body . Holes in the body for fuel-gun, fuel tank opener, aerial, glow-plug, carburetor access and exhaust. Rear and side windows may be removed. Maximum height of 75mm cut-out at rear on 20mm blocks . One opening may be made in the front windscreen with a maximum dimension of 80.0mm in any direction for refuelling and/or engine cooling. An additional hole for refuelling in the roof of 50mm is allowed and 35mm for the glow plug. Minimum distance between holes is 5mm. An extra hole for ty-rap to open tank in the front windscreen will be allowed, max.10mm. See drawings

Remarks

Updated IFMAR rules from last version August 2021.

Proposed by: EFRA, Garcia Collado Javier

Proposal Status:

Seconded by: o Not Seconded

The proposal: o Passed Unanimously o Passed with for, against and abstentions. o Rejected with for, against and abstentions. o Amended

Current Rule

10.4

Race Format

Race format will follow same procedure than other classes of IC section with exception of length of the Control timed practice heats and Qualification heats that will be 7 minutes of duration, refueling forbidden . (see rule 2.2 to 2.8 appendix 1)

Proposal

Race Format

Race format will follow same procedure than other classes of IC section with exception of length of the Control timed practice heats and Qualification heats that will be 6 minutes of duration, refueling forbidden . (see rule 2 .2 to 2 .8 appendix 1)

Remarks

Because now with the evolution of the models and the tracks where you go to race see National Championship 2021 in Gubbio and European Championship 2022 in Lostallo it will be difficult to keep track of the minutes and there is a risk of ruining the engines or that the drivers go slow to save fuel.

Proposed by: AMSCI, Geraci Vito

Proposal Status:

Seconded by: o Not Seconded

The proposal: o Passed Unanimously o Passed with for, against and abstentions. o Rejected with for, against and abstentions. o Amended

Current Rule

10.6

FUEL Specifications

Fuel or fuels must be commercially available . Fuel may only contain methanol (methyl alcohol) CAS number 67-56-1, and/or Ethanol (Ethyl Alcohol) CAS number 64-17-5, lubricating oil, a small content of anti-corrosion chemicals and maximum 16 of nitro methane (Cas number 75-52-5) in volume . The specific gravity of the mixture may not be heavier than 0.87 grams/cc at 20°C and standard atmospheric pressure . Measurement will be done with a nitromax 16% in the pit lane and/or anywhere inside the venue . Any fuel detected heavier than 0.87 will means that the driver will have the result deleted from the heat or final where the fuel was found too heavy . The following additives are strictly prohibited; Hydrazine, Hydrogen Peroxide, Toluene, Propylene Oxide .

Proposal

10.6

FUEL Specifications

Fuel or fuels must be commercially available . Fuel may only contain methanol (methyl alcohol, CAS number 67-56-1), lubricating oil, a small content of anti-corrosion chemicals and maximum 16% for 1/8 and 16% for 1/10 of methane (Cas number 75-52-5) IN WEIGHT (not in volume). The specific gravity of the mixture may not be heavier than 0.859 grams/cc at 20°C and standard atmospheric pressure. For quick testing a Nitromax 16EU can be used in the pit lane and/or anywhere inside the venue. Any fuel detected heavier than 0.87 will means that the driver will have the result deleted from the heat or final where the fuel was found too heavy. The following additives are strictly prohibited; Hydrazine, Hydrogen Peroxide, Toluene, Propylene Oxide. If an EFRA World Championship Event is to be run at a Country which permits the use of a heavier content of nitro methane (up to 25 % in volume) and the Organizer can ensure EFRA and the participants its supply track side, then the limits will be according to the IFMAR with a maximum 25% of nitro methane (Cas number 75-52-5) in volume, using for quick testing the corresponding Nitromax tool. From 1st of January 2023 the fuel of the EFRA events must be EFRA Homologated.

Remarks

Specific wording for the GT Class .. .might it not be needed. It is an umbrella for IFMAR events and Fuel Homologation ready for the future.

Proposed by: EFRA, Gomez Ambrosio Carlos

Proposal Status:

Seconded by: o Not Seconded

The proposal: o Passed Unanimously o Passed with for, against and abstentions. o Rejected with for, against and abstentions. o Amended

New Rule

12

GT ELECTRIC car 1/8 TECHNICAL RULES

The Rule is New:

Proposal

GT ELECTRIC POWERED (GT EP)

A Basic set of electric rules to be used for any EFRA European Event as supporting class .

Brushless motors with the following maximum dimensions:

Diameter: max. 44 mm Length: max. 75 mm

Motors with and without sensor are allowed.

4S lipo battery: Any kind of battery will be allowed as long as it is commercially available. Maximum 4S (4 elements in series) will be allowed in A single pack or in two packs of equal characteristics of 7.40 V. The brand, voltage, Manufacturer, etc. must be visible on each battery, not valid those batteries that have lost the original manufacturer's labels/instructions. Mandatory HARDCASE. The maximum voltage is 16.80 Volt at the start of the race. The batteries and Chargers must have an equalizer cable. The Chargers must have a program Specific for LIPO/LIFE load, i.e. CC/CV (constant current, voltage cut), with Cut according to the specifications of the EFRA (see Appendix 4) regulation and the load must be made with the cable Equalizer. The maximum permissible current charging is 12.0 A and the maximum permissible current discharge is 20.0 A. It is mandatory to use a safety bag for the batteries during charging. The controller (ESC) is optional. It is not allowed to set the reverse Gear. The maximum temperature of the battery should not exceed 55 degrees after the run.

In GT EP cars is not allowed to cut the front windshield. The antenna hole (10 mm) and side windows can be cut out. Rear window can be removed. Additional cooling holes in the front where normally is the radiator of the respective body are allowed. If the dimensions of a single hole is bigger than 10 x 12 mm the area needs to be covered from inside with a corresponding grid.

The electrical / electronic equipment consists of the battery (LiPo hardcase), controller (ESC) and a servo for steering. Electronic driving aids such as ESP and ABS are prohibited. Telemetry is allowed as long as they function is part of the remote control and the receiver, as well as the associated sensors. This applies also to passive devices for recording data, and video that have no device for radio transmission.

GT carbon chassis for electric allowed.

Minimum weight: 3800 grams

Length of the heat depending on track layout and after consultation with EFRA, it will be decided for any race before start by Race management.

Remarks

New basic rules in GT Electric following IFMAR rules and recommendations. But, at the moment it's not the intention to create another class. Just to put some guidelines in the rules in order to National Federations get a guideline about that class. For 2022 GT EP a support class in the EC to see if could be work on real class in upcoming years.

Proposed by: EFRA, Garcia Collado Javier

Proposal Status:

Seconded by: o Not Seconded

The proposal: o Passed Unanimously o Passed with for, against and abstentions.

o Rejected with for, against and abstentions. o Amended

New Rule

12.

Proposal

GT ELECTRIC car 1/8 TECHNICAL RULES

The same dimensions as GT nitro On all cars.

Braking must be a combination of electronic speed controller and motor (dynamic braking) only via the single speed fixed transmission to the rear wheels. All cars must be fitted with a failsafe device, this can also be incorporated into the receiver or speed controller.

GT Scale Electric Track Cars will be driven by Lithium based batteries with a nominal voltage of no more than 15 . 2 volts (4S). It is allowed to use 2 x 2S or 4 x 1S. If multiple individual batteries are connected together (in parallel or series), then all batteries used must be of the same manufacturer brand and same Part Number. Only homologated batteries shown on the EFRA Approved Lists on the official EFRA website will be legal for use at EFRA sanctioned events. All Lithium Batteries must comply with the published data shown on the EFRA Approved Battery Lists. Batteries that are not compliant with the dimensional rules or published weights will not be allowed. LiPo/LiFe drive batteries must be in a 'Lipo sack' at all times when being charged or discharged. This applies to any discharging procedures except during a race or when using organiser supplied resistors. Anybody not doing this will be penalised at the event. LiPo sack is defined as a receptacle designed for the purpose of charging LiPo/LiFe batteries and of a suitable construction as to contain a LiPo/LiFe fire.

Minimum weight to be 3500g (ready to race). Race format Race format will follow same procedure than other classes of IC section with exception of length of the Control timed practice heats and Qualification heats that will be 5 minutes of duration, Sub finals 20 min Finale 30 min.

All drivers have two identical cars with the same body and number. In the long run race they instead of refuelling like in nitro, change the car in the pit line. Tyre Specifications the same like in GT nitro

Height: minimum height 155.00mm with chassis plate on 20mm blocks.

Wheel base between 320-379mm

Length Maximum: 600mm

Bodies must be commercially available 1/8th scale GT1 , GT2 , Super GT , DTM , or V8 Supercar cars , 2 door GT bodies and Le Mans (like grafil bodies)

Remarks

For now, we have no rules for GT electric Long run racing is better, it is real racing. We have enough short racing through whole week. Alternative is team racing with two drivers and two cars.

Proposed by: HAMS, Matosic Zvonomir

Proposal Status:

Seconded by: o Not Seconded

The proposal: o Passed Unanimously o Passed with for, against and abstentions. o Rejected with for, against and abstentions. o Amended

10. ELECTION OF SECTION CHAIRMAN.

Up For Election: 1/10th Section Chairman Julie Thurston is willing to restand.

11. ANY OTHER BUSINESS.

12. ITEMS FOR GENERAL DISCUSSION.

Items to be discussed:

CLASSES: New classes 1/10th 220mm. What will be the future of 1/10th 200mm? How to start to use the classes in IC on road track to create a trip for new drivers in local and national level with cheap cars and easy rules? Do we need to work with the Industry in order to set up IC classes instead of continue creating classes with same performance and same level of complexity?

Proposed by: EFRA, Garcia Collado Javier

HOMOLOGATED FUEL:

Let us consider a homologation for fuel brands. Brands send us a fuel sample, and we have 2 spectrometers to set at least a fingerprint of the fuel. The samples can also be send out to a lab for deeper analysis. Fuel can than always be tested for similar fingerprints. If there is a change in fuel composition, the brand will have to send in another sample.

- 1. With a new fuel rule coming up , it would be a good starting point for everyone. That is the ideal time to put such a thing into place.
- 2. That way we can at least establish a list of approved fuels for everyone.

Proposed by: EFRA

The meeting was closed at: