

#### MICHELIN'S ENDURANCE RACING RECORD AT SILVERSTONE

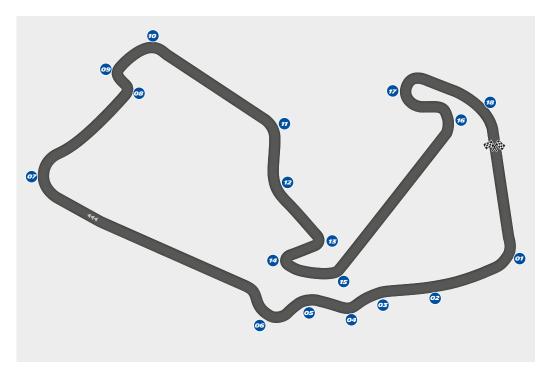
» Michelin has won the 6 Hours of Silverstone as an FIA WEC round with Audi (3 times), Toyota (2), Porsche (1) and Rebellion (1)



- » Michelin won the 1,000km of Silverstone as a European Le Mans Series round in 2004, 2005, 2007, 2008 and 2009
- » Going further back, Michelin won the 500km of Silverstone (Sportscar World Championship) with Peugeot in 1992
- » Michelin has won FIA GT races at Silverstone with McLaren, Chrysler, Porsche, Aston Martin and Saleen
- » Michelin won the Formula 1 grand prix at Silverstone in 1981, 1983, 2005 and 2006

### SILVERSTONE CIRCUIT

31 5.901 KM 18TURNS CLOCKWISE



Щ	(LOCAL TIME)	FRIDAY, AUGUST 30		
66		11:40pm	Free Practice 1	90 minutes
3		4:30pm	Free Practice 2	90 minutes
		SATURDAY, AUGUST 31		
<u> </u>		9:00am	Free Practice 3	60 minutes
		11:50am	LM GTE qualifying	20 minutes
		12:20pm	LMP qualifying	20 minutes
		SUNDAY, SEPTEMBER 1		
		12:00 noon	Start of the 4 Hours o	f Silverstone

Circuit time (GMT +2)
Source: fiawec.com - Informations susceptibles de changer

#### **SILVERSTONE**

- » Hosting an FIA WEC round for the  $8^{\text{th}}$  time
- » Famous for its high-speed corners
- » Maggots-Becketts-Chapel is one of motor racing's best-known sequences of corners
- » Layout modified in 2010 and 2011
- » Hosts rounds of the FIA WEC, Formula 1 and MotoGP world championships...

## 2019 4 HOURS OF SILVERSTONE

- Opening round of the 2019/2020
   FIA World Endurance Championship
- » First four-hour race since the FIA WEC's creation in 2012







#### PIERRE ALVES

Manager of Michelin Motorsport's Endurance Racing Programmes

"Because of heat build-up generated through its highspeed corners, Silverstone makes big demands on tyres, while the weather could well be an influencing factor again this year. The track has been resurfaced for the second time in two years and the bumps have been either smoothened or eliminated. We have had good feedback concerning our latest tyres following the FIA WEC's Prologue test. This season, tyre changes will not be allowed while refuelling is in progress, so tyre strategies and longevity promise to play a key role once more"

**HEAT BUILD-UP GENERATED THROUGH** SILVERSTONE'S **HIGH-SPEED CORNERS MAKES BIG DEMANDS** ON TYRES



### SLICK





## MICHELIN TYRES

28 OF THE 31 CARS RACING ON MICHELIN TYRES

#### MICHELIN TYRES FOR THE 2019 4 HOURS OF SILVERSTONE

	SLICKS Soft, Medium	INTERMEDIATES	WET
LM P1	31/71-18	31/71-18	31/71-18
	SLICKS Medium, Hard	INTERMEDIATES	WET
LM P2	AV : 30/68-18 AR : 31/71-18	AV : 30/68-18 AR : 31/71-18	AV : 30/68-18 AR : 31/71-18
	SLICKS Medium, Hard	INTERMEDIATES	WET
LM GTE PRO	AV : 30/68-18 AR : 31/71-18	AV : 30/68-18 AR : 31/71-18	AV : 30/68-18 AR : 31/71-18
	SLICKS Soft, Medium, Hard	INTERMEDIATES	WET
LM GTE AM	AV : 30/68-18 AR : 31/71-18	AV : 30/68-18 AR : 31/71-18	AV : 30/68-18 AR : 31/71-18

Width (cm) / exterior diameter (cm) x interior diameter (inches).

#### TYRE QUOTAS

	Free Practice	Qualifying + Race
LM P1	12 tyres	18 tyres
LM P2	12 tyres	18 tyres
LM GTE PRO	12 tyres	18 tyres
LM GTE AM	16 tyres	22 tyres





#### **2018** RACE

- **» Winners:** Beche/Laurent/Menezes (Rebellion R13/Michelin), 193 laps
- » Pole Position: Conway/ Kobayashi/Lopez (Toyota TS050 Hybrid/Michelin), 1m36.895s
- » Fastest race lap: Kamui Kobayashi (Toyota TS050 Hybrid/ Michelin), 1m39.602s
- » Both Toyota TS050 Hybrids disqualified after the race
- » Rebellion Racing's first FIA WEC one-two finish
- » Exciting battle in LM GTE Pro between all the carmakers involved. Victory for Ferrari/ Michelin

#### SILVERSTONE <mark>TRIVIA</mark>

- » Silverstone Circuit is built on a former Royal Air Force airfield
- » In 1950, Silverstone hosted the very first Formula 1 World Championship race
- » The circuit straddles the English counties of Northamptonshire and Buckinghamshire
- » Silverstone hosted a Sportscar World Championship round in 1976
- » Numerous F1 teams are based near Silverstone

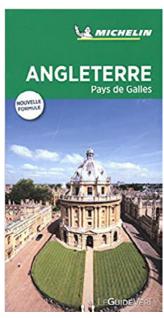
#### MICHELIN GREEN GUIDE

» Explore England and Wales with the Michelin Green Guide

https://travelguide.michelin.com/ europe/united-kingdom/grandebretagne























# ENTRY LIST 2019 4 HOURS OF SILVERSTONE

	LM P1	
N°1	REBELLION RACING • REBELLION R13 - GIBSON SENNA/MENEZES/NATO	NICHELIN
N°3	REBELLION RACING • REBELLION R13 - GIBSON BERTHON/DERANI/DUVAL	MICHELIN
N°5	TEAM LNT • GINETTA G60-AER ROBERTSON/HANLEY/ORUDZHEV	MICHELIN
N°6	TEAM LNT • GINETTA G60-AER SIMPSON/DYSON/SMITH	MICHELIN
N°7	TOYOTA GAZOO RACING • TOYOTA TS050 - HYBRID CONWAY/KOBAYASHI/LOPEZ	MICHELIN
N°8	TOYOTA GAZOO RACING • TOYOTA TS050 - HYBRID BUEMI/NAKAJIMA/HARTLEY	MICHELIN

	LM P2	
N°22	UNITED AUTOSPORTS • ORECA07-GIBSON HANSON/ALBUQUERQUE/DI RESTA	MICHELIN
N°29	RACING TEAM NEDERLAND • ORECA 07 - GIBSON VAN EERD/VEN DER GARDE/VAN UITERT	MICHELIN
N°33	HIGH CLASS RACING • ORECA07-GIBSON PATTERSON/YAMASHITA/FJORDBACH	
N°36	SIGNATECH ALPINE ELF • ALPINE A470-GIBSON LAURENT/NEGRAO/RAGUES	MICHELIN
N°37	JACKIE CHAN RACING • ORECA07-GIBSON TUNG/AUBRY/STEVENS	
N°38	JOTA • ORECA 07 - GIBSON GONZALEZ/MALDONADO/DAVIDSON	
N°42	COOL RACING • ORECA 07 - GIBSON LAPIERRE/BORGA/COIGNY	MICHELIN
N°47	CETILAR RACING • DALLARAP217-GIBSON LACORTE/BELICCHI/SERNAGIOTTO	MICHELIN







# ENTRY LIST 2019 4 HOURS OF SILVERSTONE

	LM GTE PRO	
N°51	AF CORSE • FERRARI 488 GTE EVO CALADO/PIER GUIDI	MICHELIN
N°71	AF CORSE • FERRARI 488 GTE EVO RIGON/MOLINA	MICHELIN
N°91	PORSCHE GT TEAM • PORSCHE 911 RSR-19 BRUNI/LIETZ	MICHELIN
N°92	PORSCHE GT TEAM • PORSCHE 911 RSR-19 CHRISTENSEN/ESTRE	MICHELIN
N°95	ASTON MARTIN RACING • ASTON MARTIN VANTAGE AMR SORENSEN/THIIM	MICHELIN
N°97	ASTON MARTIN RACING • ASTON MARTIN VANTAGE AMR LYNN/MARTIN	MICHELIN

	LM GTE AM	
N°54	AF CORSE • FERRARI 488 GTE EVO FLOHR/CASTELLACCI/FISICHELLA	MICHELIN
N°56	TEAM PROJECT 1 • PORSCHE 911 RSR PERFETTI/HEINEMEIER-HANSON/CAIROLI	MICHELIN
N°57	TEAM PROJECT 1 • PORSCHE 911 RSR KEATING/FRAGA/BLEEKEMOLEN	MICHELIN
N°62	RED RIVER SPORT • FERRARI 488 GTE EVO GRIMES/MOWLEN/HOLLINGS	MICHELIN
N°70	MR RACING • FERRARI 488 GTE ISHIKAWA/BERETTA/COZZOLINO	MICHELIN
N°77	DEMPSEY-PROTON RACING • PORSCHE 911 RSR RIED/CAMPBELL/PERA	MICHELIN
N°83	AF CORSE • FERRARI 488 GTE EVO PERRODO/COLLARD/NIELSEN	MICHELIN
N°86	GULF RACING • PORSCHE 911 RSR WAINWRIGHT/WATSON/BARKER	MICHELIN
N°88	DEMPSEY-PROTON RACING • PORSCHE 911 RSR PREINING/TBA/TBA	MICHELIN
N°90	TF SPORT • ASTON MARTIN VANTAGE YOLUC/EASTWOOD/ADAM	MICHELIN
N°98	ASTON MARTIN RACING • ASTON MARTIN VANTAGE DALLA LANA/TURNER/GUNN	MICHELIN







## 2019-2020 SEASON CALENDAR









#### EXTRACTS FORM THE FIA WEC SPORTING REGULATIONS

Two drivers from each crew must set at least one timed lap during qualifying. The average of the two best lap time times (the best of each driver) will serve as the reference time for establishing the grid (except Le Mans). If two or more crews set identical average times, priority is given to the one who set it first.

For the LMP2 category, one of the two timed laps used for the establishment of the grid must be completed by a Silver or Bronze driver.

For the LMGTE Am category, one of the two timed laps used for the establishment of the grid must be completed by a Bronze driver.

Races start after a formation lap.

To be classified, a car must cross the finish line must have covered at least 70% of the distance covered by the car classified in first place in the overall classification.

#### POINTS-SCORING SYSTEM **4-HOUR RACES**

1st - 25 points

2<sup>nd</sup> - 18 points

3<sup>rd</sup> - 15 points

4<sup>th</sup> - 12 points

5th - 10 points

6th - 8 points 7<sup>th</sup> - 6 points

8th - 4 points

9<sup>th</sup> - 2 points

10<sup>th</sup> - 1 point

+10th - 0.5 point

Pole position: +1 point **Drivers and Manufacturers** 

For all the above classifications, an

additional point will be awarded, at each Competition, to the «pole position» team in each category (best time achieved by the car in each category during qualifying with the exception of additional cars), as well as to all the drivers making up the crew of the car concerned.

#### FIA WEC TYRE REGULATIONS

#### **6.5 TYRES**

#### 6.5.1 Definitions and general conditions

Each tyre must be identified by RFID and barcode. All references must be declared to the Technical Delegate at least 48 hours before the start of the Competition. This list of designated tyres will be notified to the Stewards at the beginning of the Competition.

All tyres must be identifiable at any time (including when tyres are fitted on the car) via direct measurement by the RFID detection system put in place by the FIA. This includes automatic and manual detection. When tyres are fitted on the car, RFID must be on the outer side of

Only in case of malfunction of the RFID system, manual measurement will be handled via barcode identification.

The use of undeclared tyres is prohibited in all Competitions of the Championship.

To allow automatic detection, each car must be equipped with RFID stickers according to Appendix 6. These stickers must be in place at all times during the Competition.

#### 6.5.2 Dry-weather tyres: **Declaration of specifications** for the season

Tyre manufacturers may declare to the FIA/ACO a maximum of 3 tyre specifications per season, which will be frozen for the duration of the season. 2 of them must be declared at least 48 hours before the first Competition of the season.

Specifications break down as follows:

- LMP1 H, LMGTE Pro, LMGTE Am: 3 specifications per car model
- LMP1 NH, LMP2: 3 specifications for all models of cars entered in the category

#### 6.5.3 Dry-weather tyres: **Declaration of specifications** for the Competition

At the latest 48 hours before the beginning of any given Competition, tyre manufacturers must declare to the Technical Delegate 2 (or 3 if applicable) of the tyre specifications described in Article 6.5.2) to be used by Competitors during the Competition, to the exclusion of any other.

Tyre specifications are limited to 2 for Competitions comprising a race of 12 hours or less and to 3 for Competitions comprising a race of more than 12 hours.

#### 6.5.4 Dry-weather tyres: allocations

#### **4-HOUR RACE OF SILVERSTONE QUALIFYING + RACE**

LMP1 - HY > 18 LMP1 - nH > 18 LMP2 > 18 LMGTE Pro > 18 LMGTE Am > 22

#### 6.5.5 Dry-weather tyres: collection and reintroduction (LMP1 H, LMP1 NH and LMGTE Pro only)

#### **Collection:**

30 At the latest the day before the beginning of the first Competition, the Technical Delegate will segregate tyres per specification and per car model which will have to be reintroduced in all the following Competitions of the Championship.

Segregation will proceed as follows:

For the first 2 specifications declared before the first Competition of the season:

- Segregation of 1 set\* of tyres per specification per car model and per Competition comprising a race of 6 hours (or less)
- Segregation of 2 sets\* of tyres per specification per car model and per Competition comprising a race of 6 hours or greater but less than 24 hours
- Segregation of 3 sets\* of tyres per specification per car model and per Competition comprising a race of 24 hours
  - \* A set of tyres is a set of 4 tyres made up of 2 front tyres and 2 rear tyres













If the third specification is declared at the same time as the first two, it will be part of the segregation process described above. After segregation, the Technical Delegate will communicate to the tyre manufacturer the full list of segregated tyres for the full season.

If the third specification is declared after the first Competition, the same segregation process will be applied taking into account the number of Competitions remaining in the season.

After segregation, the Technical Delegate will communicate to the tyre manufacturer an update of the list of segregated tyres.

Tyres to be reintroduced must not be part of the references declared by tyre manufacturers to the Technical Delegates before each Competition.

#### **Réintroduction:**

From the second race Competition, at the latest 24 hours before the start of the race, the Technical Delegate will transmit to the Competitors and tyre manufacturers the list of tyres for re-allocation, mentioning the number of the car on which each tyre is to be used. This list will be notified to the Stewards.

Each Competitor is responsible for the reintroduction of tyres, and must do so in compliance with these regulations.

Each tyre must be reintroduced on the first use of new tyres of the specification concerned during the race.

#### 6.5.6 Wet-weather tyres: declaration of specifications for the season

Tyre manufactures must declare wetweather tyre specifications as listed below. Any specification will be frozen for the season and must be declared to the Technical Delegate at the latest 48 hours before the first Competition of the season. A drawing of the declared specifications must be sent with the declaration (digital format and on 1:1 scale tracing paper).

- LMP1 H: 1 intermediate and 2 wet specifications per car model
- LMP1 NH: 1 intermediate and 2 wet specifications for all models of cars entered in the category
- LMP2: 1 intermediate and 1 wet specification for all models of cars entered in the category
- LMGTE Pro / LMGTE Am: 1 intermediate and 1 wet specification per car model

#### 6.5.7 Wet-weather tyres: declaration of specifications for the Competitions

The number of wet-weather tyre specifications usable during a Competition is not limited, subject to the provisions of Article 6.5.6

#### 6.5.8 Wet-weather tyres: allocation

Unless specifically authorised in the present Regulations, wet-weather tyres may be used only after the track has been declared wet by the Clerk of the Course / Race Director.

The number of wet-weather t tyres usable during a Competition is not limited

#### 6.5.9 Tyres used to join the starting grid

Tyres used for going from the pits to the starting grid before the race may be either wet-weather or dry weather tyres and will not be counted in the allocation of tyres.

#### 6.5.10 Change of tyre manufacturer during the season

A change of tyre manufacturer is not allowed during the season for the LMGTE Pro and LMGTE Am categories. It is allowed only once for the LMP1 H, LMP1 NH and LMP2 categories.

#### 6.5.11 Specific sessions

During a Competition, if a specific test session (e.g. Safari circuit) is organised by the Promoter of the Competition, conditions regarding tyre limitation and declaration will not be applied.

#### 6.5.12 Grooving and regrooving

Grooving tyres is strictly prohibited. The regrooving of the tyres is not allowed in LMP2 and LMGTE Am. The regrooving of tyres is allowed in LMP1 H, LMP1 NH and LMGTE Pro.

#### **6.5.13 Exchange of commercial** tyres (for the LMP2 category only)

Each tyre manufacturer may be given used tyres, used during a Competition, of the other manufacturers in their category. This applies to both dry-weather and wet-weather tyre specifications.

Tyre exchange is to be done with the support and confirmation of the Technical Delegate.

#### Exchange of new tyres (applicable for dry-weather and wet-weather tvres):

Any tyre specification declared for the Championship must be exchanged at the first Competition during which it is introduced.

This process may be repeated only once per season, at the 24 Hours of Le Mans.

#### Exchange of used tyres (applicable for drv-weather and wet-weather tyres):

A full set of tyres, used during the race, may be exchanged between tyre manufacturers.

This process may be repeated at every race in the Championship (upon request from a tyre manufacturer during the Competition). The exchange is to be notified within 1 hour after the end of the race.

#### 6.5.14 Applicable Penalties

Penalty for breaching the tyre rule: 3-minute Stop & Go per infringement.

#### **PIT STOP** REGULATIONS

#### 12.5 Safety and obligations during wheel/tyre changes

#### 12.5.1 Where wheel/tyre changes are authorised

Wheel/tyre changes are authorised only:

- On the starting grid up to the «3 minutes» board
- In the working area in front of the car's pit, on the conditions defined by Article 12.3
- As an exception, the tyres may be changed inside the garage if and only if the car has been pushed there for the purpose of carrying out mechanical operations on it. This dispensation of the established principle will be interpreted restrictively
- On the track during the suspension of a race according to Article 14.3.

#### 12.5.2 Obligations of the mechanics

For a wheel change, mechanics must:

- bring a maximum of two pneumatic wheel guns into the working area,
- without external assistance, take the new wheels, fit them on the car and put the replaced ones between the garage and the 2.5 m line or inside the garage,
- carry at all times the detached wheels when they are outside the garage. However, in order to facilitate the wheel changes, it is possible to lay them flat on the ground near the car just during the change of the wheel concerned,
- · not throw the wheels or drop them,

• disconnect the air jacks and take the equipment back behind the 2.5 m line.

At no moment beyond the 2.5 m line may wheel(s), wheel gun(s), bodywork or any other equipment be left unattended by one of the four mechanics

The area situated between the painted line in front of the pit shutter and the 2.5 m painted line may be used for tyres and the tools necessary for these operations. No assistance may be given by a person standing in that area.

For any wheel that the mechanics lose control of, or for any other infringement of the present article: penalty at the Stewards' discretion.

#### 12.5.3 Restrictions concerning equipment

It is prohibited to have any equipment:

- For speeding up the removal of the wheels. Only two wheel guns or two pneumatic torque wrenches are authorised per car in the working area at any given time. A maximum of 2 different pneumatic wheel guns can be used during a wheel change to change the tyres.
- For warming the tyres and/or keeping them at constant temperature in the working area, in the garage and on the starting grid. (see Article 12.1.2) Penalty in case of infringement: at the Stewards' discretion.
- Which is operated using an external power source (electrical, pneumatic, etc.), with the exception of the two wheel guns and the air-jack coupling.











