



# RACEGUIDE

2024 FIA WEC



## TOTAL ENERGIES 6 HOURS OF SPA-FRANCORCHAMPS

Round 3, 2024 FIA World Endurance Championship (FIA WEC)

**BELGIUM**

12<sup>TH</sup> EDITION



#WeRaceForChange

THURSDAY  
MAY  
**9**

**Free Practice 1**  
11:30am  
(90 minutes)

**Free Practice 2**  
7:00pm  
(90 minutes)

FRIDAY  
MAY  
**10**

**Free Practice 3**  
11:00am (60 minutes)

**Hypercar Qualifying**  
3:30pm (15 minutes)

**Hypercar Hyperpole**  
3:53pm (12 minutes)

SATURDAY  
MAY  
**11**

1:00pm  
Start

Local time • SOURCE : [fiawec.com](http://fiawec.com) - information subject to change



# THE CIRCUIT

CIRCUIT DE SPA-FRANCORCHAMPS

» FAST AND HILLY

» INCLUDES SOME OF MOTOR RACING'S MOST CELEBRATED CORNERS (EAU ROUGE, RAIDILLON, BLANCHIMONT, ETC.)

» THE FAMOUS EAU ROUGE RAIDILLON SEQUENCE WAS ADDED IN 1939, 85 YEARS AGO

» TRACK PARTIALLY RESURFACED IN 2022

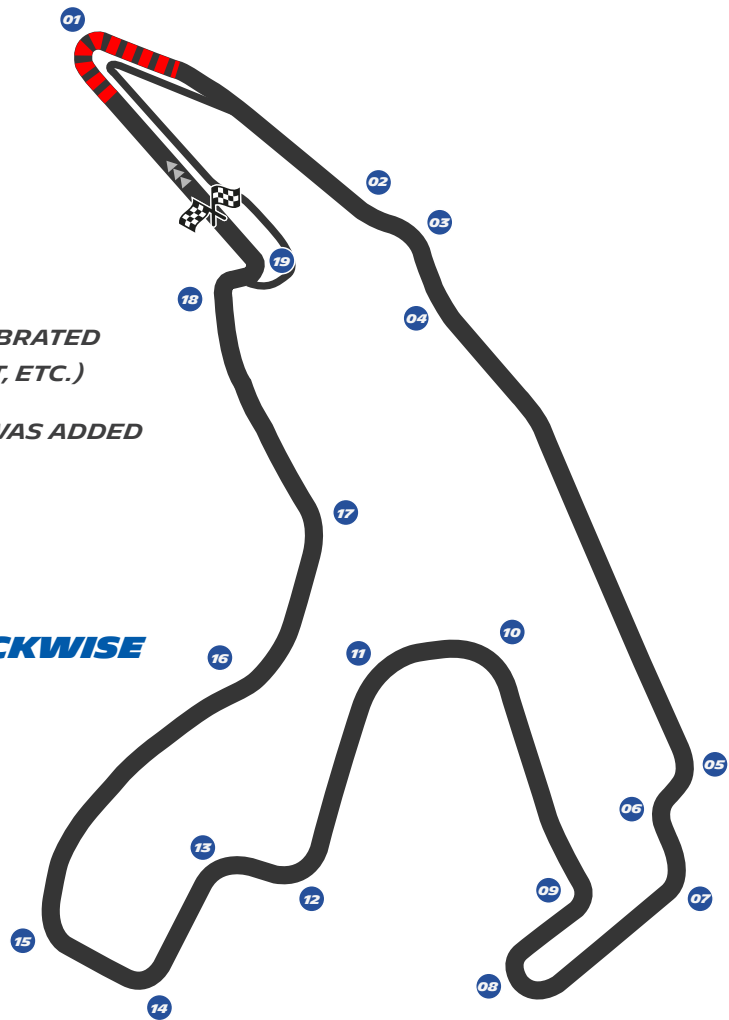
**7.004KM** / **19 TURNS** / **CLOCKWISE**



**FASTEST RACE LAP (FIA WEC)**

**STÉPHANE SARRAZIN**

(Toyota TS050 Hybrid/Michelin),  
1m53.658s (2017)



## THE 2024 EDITION

**88<sup>th</sup> FIA WORLD ENDURANCE CHAMPIONSHIP ROUND**



Dress rehearsal  
for the 2024  
Le Mans 24  
Hours (June  
15-16)

Toyota/Michelin  
unbeaten at the  
6 Hours of Spa-  
Francorchamps  
since 2017

First visits to Spa-  
Francorchamps for the  
Alpine, BMW, Lamborghini,  
Isotta Fraschini and  
Peugeot evo2 Hypercars

19 Hypercar  
prototypes fielded  
by 9 different  
manufacturers, all  
on Michelin tires





## THE 2023 RACE



### » Winners:

Conway/Kobayashi/Lopez  
(Toyota GR010 Hybrid/Michelin),  
148 laps

### » Pole Position:

Kamui Kobayashi (Toyota  
GR010 Hybrid/Michelin),  
2m0.812s

### » Fastest race lap:

Kamui Kobayashi (Toyota GR010  
Hybrid/Michelin), 2m2.327s

### » Top Speed: James Calado

(Ferrari 499P/Michelin), 321.5kph

» Damp start, with some  
Hypercars on slicks, others on  
rain tires

» The #7 Toyota started on slicks  
and won the race after double-  
stinting

» Toyota's seventh straight win  
at Spa-Francorchamps

» Numerous offs

» The #50 Ferrari clinched third  
place on the last lap

## MICHELIN'S RECORD

6 HOURS OF SPA-FRANCORCHAMPS

**2012** Dumas/Duval/Gené  
(Audi R18 Ultra/Michelin)

**2013** Fässler/Lotterer/Tréluyer  
(Audi R18 e-tron quattro/Michelin)

**2014** Davidson/Lapierre/Buemi  
(Toyota TS040 Hybrid/Michelin)

**2015** Fässler/Lotterer/Tréluyer  
(Audi R18 e-tron quattro/Michelin)

**2016** Di Grassi/Duval/Jarvis  
(Audi R18/Michelin)

**2017** Buemi/Davidson/Nakajima  
(Toyota TS050 Hybrid/Michelin)

**2018** Alonso/Buemi/Nakajima  
(Toyota TS050 Hybrid/Michelin)

**2019** Buemi/Nakajima/Alonso  
(Toyota TS050 Hybrid/Michelin)

**2020** Conway/Kobayashi/Lopez  
(Toyota TS050 Hybrid/Michelin)

**2021** Buemi/Nakajima/Hartley  
(Toyota GR010 Hybrid/Michelin)

**2022** Conway/Kobayashi/Lopez  
(Toyota GR010 Hybrid/Michelin)

**2023** Conway/Kobayashi/Lopez  
(Toyota GR010 Hybrid/Michelin)



## MICHELIN STATISTIC

The Hypercar prototypes' left-hand tires are subjected to a load of 1,500kg and cornering forces of up to 3.5g through Raidillon Eau Rouge, making it the season's toughest corner on tires.



## PIERRE ALVES

Endurance Racing Manager,  
Michelin Motorsport

Spa-Francorchamps is the FIA WEC's second-fastest venue after Le Mans. It features eight high-speed corners and two spots that call for very hard braking, so we are able to correlate our data there with Circuit de la Sarthe. The track was partially resurfaced in 2022, including the famous Eau Rouge compression which is now safer. The loads exerted on the rear wheels and left-hand tires through this sequence are extremely high and put the MICHELIN Pilot Sports' casings to a big test. Then, from Raidillon to Les Combes, the Hypercars don't put much strain on their tires,

**THIS IS THE FIRST  
RACE OF 2024  
WHERE WE WILL  
HAVE THE SOFT  
MICHELIN PILOT  
SPORT**

causing the latter to cool ahead of Les Combes, Rivage, Pouhon and Fagnes. The surface is quite hard-wearing and the resulting degradation means different tire strategies can be envisaged. This is the first race of 2024 where we will have the soft MICHELIN Pilot Sport [white sidewall markings], so we will use it to establish its ideal temperature window with Le Mans in mind. The weather is often changeable at Spa, so we might well see the MICHELIN Pilot Sport Wet back in action after its strong performance at Imola.



### MICHELIN'S FIA WEC RECORD

**87  
WINS**

WITH 6 DIFFERENT MAKES  
including Toyota (46 wins) and Porsche (18)  
WITH 43 DIFFERENT DRIVERS  
including Buemi (24 wins), Hartley (21) and Conway (18)

**11**

MANUFACTURERS'  
**WORLD TITLES**

**11**

DRIVERS'  
**TITLES**





# THE MICHELIN PILOT SPORT RANGE FOR THE 6 HOURS OF SPA

## HYPERCAR

### All 19 Hypercar prototypes on Michelin tires



The MICHELIN Pilot Sports raced by today's sophisticated Hypercar prototypes was developed on simulators in the space of just months. Michelin has since continued to work on its reliable, high-performance range

of endurance racing tires in response to the demand for superior longevity inline with Michelin's Everything Sustainable plan.

The regulations for the 2024 FIA World Endurance Championship restrict the number of different slick specifications to just two (three for Le Mans), plus a single type of rain tire. Tire warming systems are no longer authorized.

These two parameters have led Michelin Motorsport's engineers to work on the compounds of its slicks to make them even more versatile and enhance their warm-up performance.

Meanwhile, the single type of rain tire needs to cover a broad spectrum of conditions, from damp and drying, to heavy rain. The resulting solution combines a tread pattern with greater versatility.

All of the Hypercar prototypes (LMH/LMDh) race on MICHELIN Pilot Sports, front: 29/71-18, rear 34/71-18.



#### SLICKS

**Soft** (white): soft compound / dry or slightly damp conditions / low temperatures (nighttime racing / early morning)

**Medium** (yellow): medium compound / dry conditions

#### RAIN TIRE

**Rain** (blue)  
soft compound / wet conditions / versatile

#### SLICK ALLOCATIONS

Free Practice	12 tires
Hyperpole	4 tires (soft)
Qualifying + Race	18 tires

**SIZES: FRONT: 29/71-18 • REAR: 34/71-18**

Width (cm) / Exterior Diameter (cm) – Interior Diameter (inches)

#### TECHNICAL REQUIREMENTS

Minimum FRONT Stabilized Relative Pressure	1,8b = 26,1psi
Minimum REAR Stabilized Relative Pressure	1,9b = 27,6psi
Maximum FRONT camber at static ride height*	-3,0°
Minimum FRONT camber at static ride height*	-1,0°
Minimum REAR camber at static ride height*	-2,3°
Maximum REAR camber at static ride height*	-1,0°

(\*) For example, if the minimum static camber angle is -3°, competitors may run at -2.5° but not at -3.5°



**HYPERCAR****MICHELIN PARTNERS**

19 HYPER PROTOTYPES REPRESENTING 9 MANUFACTURERS

**#2 CADILLAC RACING**

Cadillac V-Series.R (LMDh)



E. BAMBER  
 A. LYNN

**#11 ISOTTA FRASCHINI**

Isotta Fraschini Tipo6-C (LMH)\*



A. SERRAVALLE  
 C. BENNET  
 J-K. VERNAY

**#5 PORSCHE PENSKE MOTORSPORT**

Porsche 963 (LMDh)



M. CAMPBELL  
 M. CHRISTENSEN  
 F. MAKOWIECKI

**#6 PORSCHE PENSKE MOTORSPORT**

Porsche 963 (LMDh)



K. ESTRE  
 A. LOTTERER  
 L. VANTHOOR

**#7 TOYOTA GAZOO RACING**

Toyota GR010 Hybrid (LMH)



M. CONWAY  
 K. KOBAYASHI  
 N. DE VRIES

**#8 TOYOTA GAZOO RACING**

Toyota GR010 Hybrid (LMH)



S. BUEMI  
 B. HARTLEY  
 R. HIRAKAWA

**#12 HERTZ TEAM JOTA**

Porsche 963 (LMDh)



W. STEVENS  
 C. LLOTT

**#38 HERTZ TEAM JOTA**

Porsche 963 (LMDh)



J. BUTTON  
 P. HANSON  
 O. RASMUSSEN

**#15 BMW M TEAM WRT**

BMW M Hybrid V8 (LMDh)\*



D. VANTHOOR  
 R. MARCIELLO  
 M. WITTMANN

**#20 BMW M TEAM WRT**

BMW M Hybrid V8 (LMDh)\*



S. VAN DER LINDE  
 R. FRIJNS  
 R. RAST

**#35 ALPINE ENDURANCE TEAM**

Alpine A424 (LMDh)\*



P-L. CHATIN  
 J. GOUNON  
 C. MILES

**#36 ALPINE ENDURANCE TEAM**

Alpine A424 (LMDh)\*



N. LAPIERRE  
 M. SCHUMACHER  
 M. VAXIVIERE

**#50 FERRARI AF CORSE**

Ferrari 499P (LMH)



A. FUOCO  
 M. MOLINA  
 N. NIELSEN

**#51 FERRARI AF CORSE**

Ferrari 499P (LMH)



A. PIER GUIDI  
 J. CALADO  
 A. GIOVINAZZI

\* FIA WEC debut



**HYPERCAR****MICHELIN PARTNERS**

19 HYPER PROTOTYPES REPRESENTING 9 MANUFACTURERS

#63 **LAMBORGHINI IRON LINX**

Lamborghini SC63(LMDh)\*



M. BORTOLOTTI  
 A. CALDARELLI  
 D. KVYAT

#83 **AF CORSE**

Ferrari 499P (LMH)



R. KUBICA  
 R. SHWARTZMAN  
 Y. YE

#93 **PEUGEOT TOTALENERGIES**

Peugeot 9X8 (LMH)



M. JENSEN  
 N. MÜLLER

2024 VERSION

#94 **PEUGEOT TOTALENERGIES**

Peugeot 9X8 (LMH)



P. DI RESTA  
 L. DUVAL

2024 VERSION

#99 **PROTON COMPETITION**

Porsche 963 (LMDh)



H. TINCKNELL  
 N. JANI  
 J. ANDLAUER

\* FIA WEC debut

**THE MICHELIN-EQUIPPED HYPERCAR PROTOTYPES**



VOITURE	POWER UNIT	POWER	TRANSMISSION
TOYOTA GRO10 HYBRID (LMH)	3.5-liter V6 bi-turbo + Toyota Hybrid System (front wheels)	500kW + 200kW	four-wheel drive, seven-speed Xtrac sequential gearbox
PEUGEOT 9X8 (LMH)	2.5-liter V6 bi-turbo + Peugeot MGU (front wheels)	500kW + 200kW	four-wheel drive, seven-speed Sadev sequential gearbox
FERRARI 499P (LMH)	3-liter V6 bi-turbo + hybrid system (front wheels)	500kW + 200kW	four-wheel drive, seven-speed Xtrac sequential gearbox
ISOTTA FRASCHINI TIPO6-C (LMH)	V6 turbo + MGU (front wheels)	500kW + 200kW	four-wheel drive, seven-speed Xtrac sequential gearbox
PORSCHE 963 (LMDh)	4.6-liter V8 bi-turbo + Bosch MGU (rear wheels)	500kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox
CADILLAC V-SERIES.R (LMDh)	5.5-liter V8 + Bosch MGU (rear wheels)	500kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox
ALPINE A424 (LMDh)	3.4-liter V6 turbo + Bosch MGU (rear wheels)	500kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox
BMW M Hybrid V8 (LMDh)	4-liter V8 bi-turbo + Bosch MGU (rear wheels)	477kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox
LAMBORGHINI SC63 (LMDh)	3.8-liter V8 bi-turbo + Bosch MGU (rear wheels)	500kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox





# HYPERCAR STANDINGS

## FIA WORLD ENDURANCE HYPERCAR CHAMPIONSHIP

MANUFACTURERS			R1 2/03	R2 21/04	R3 11/05	R4 15-16/06	R5 14/07	R6 1/09	R7 15/09	R8 2/11	TOTAL
1 <sup>er</sup>	PORSCHE		39	18							57
2 <sup>e</sup>	TOYOTA		23	25							48
3 <sup>e</sup>	FERRARI		18	13							31

DRIVERS			R1 2/03	R2 21/04	R3 11/05	R4 15-16/06	R5 14/07	R6 1/09	R7 15/09	R8 2/11	TOTAL
1 <sup>er</sup>	ANDRÉ LOTTERER		38	18							56
1 <sup>er</sup>	KÉVIN ESTRE		38	18							56
1 <sup>er</sup>	LAURENS VANTHOOR		38	18							56
2 <sup>e</sup>	KAMUI KOBAYASHI		15	25							40
2 <sup>e</sup>	MIKE CONWAY		15	25							40
2 <sup>e</sup>	NYCK DE VRIES		15	25							40
3 <sup>e</sup>	FRÉDÉRIC MAKOWIECKI		24	15							39
3 <sup>e</sup>	MATT CAMPBELL		24	15							39
3 <sup>e</sup>	MICHAEL CHRISTENSEN		24	15							39

### ENDURANCE RACING: AN INNOVATION ACCELERATOR FOR MICHELIN

Michelin sees motorsport in general, and endurance racing and the Le Mans 24 Hours in particular, as a means to accelerate innovation. The proportion of renewable/recycled raw materials that go into MICHELIN Pilot Sport endurance-racing rain tires stands at 45 percent.

In 2021, Michelin presented a demonstration tire containing 46 percent recycled/renewable raw materials for the MissionH24 hydrogen fuel-cell racing prototype.

Since last season, the Full Wet rain tires actually raced by endurance racing's Hypercar prototypes incorporate 45 percent renewable/recycled raw materials.

Motorsport is one of the driving forces behind Groupe Michelin's Everything Sustainable plan for 2050.

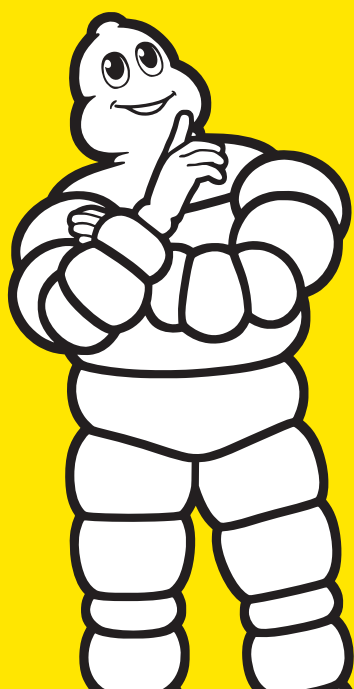






## GREEN GUIDE

Explore Belgium's charming towns and cities, museums and countryside, and learn about its culinary specialties and local beers with the Michelin Green Guide.



## SPA-FRANCORCHAMPS TRIVIA



- » The Belgian town of Spa is situated near the High Fens Mountains in the province of Liege, Wallonia
- » Spa has been a famed spa resort since Roman times
- » Europe's first casino (La Redoute) opened in Spa in 1762. The town's Thermal Baths opened in 1868

- » Spa has been a UNESCO World Heritage site since 2021 and is one of Europe's 11 big spa towns
- » Corners like La Source, Eau Rouge and Pouhon derive their names from the numerous sources of iron-rich water located near Circuit de Spa-Francorchamps
- » The original circuit inaugurated in 1921 formed a triangle that linked the towns of Francorchamps, Malmedy and Stavelot.
- » This original layout hosted a Formula 1 grand prix for the first time in 1970 and a prototype race for the last time in 1975
- » In 1973, Henri Pescarolo posted a lap record for the layout at an average speed of 262.46kph in a Matra 670B

## MICHELIN MOTORSPORT AND SPA-FRANCORCHAMPS



- » Michelin won the 1,000km of Spa every year from 2002 and 2011
- » Michelin has won at Spa-Francorchamps in Formula 1, the Sportscar World Championship, the FIA WEC, the European Le Mans Series, the BPR, the FIA GT Championship and the Blancpain Series, etc.

- » In 2012, Michelin introduced its innovative Hybrid tire at Spa. Motor racing's first 'slick intermediate' enjoyed a highly successful career
- » In 2018, the Evo version of the Porsche 919 Hybrid/Michelin established a new record for Spa-Francorchamps (1m41.770s) in the hands of Neel Jani during the car's farewell tour
- » The FIA WEC's new Hypercar prototypes made their first public appearance at the 6 Hours of Spa-Francorchamps in 2021 equipped with a new range of MICHELIN Pilot Sports developed entirely on the simulator
- » The 24 Hours of Spa-Francorchamps celebrates its centenary this year. Michelin won this classic race 13 times in the period from 1995 to 2012

# WHAT'S NEW IN 2024

## CLASSES

Only two classes: Hypercar and LMGTC3

The Hypercar class covers LMH (hybrid and non-hybrid) and LMDh (hybrid) prototypes

LMH prototypes: Toyota GR010 Hybrid, Peugeot 9X8, Ferrari 499P, Isotta Fraschini Tipo6-C

LMDh prototypes : Porsche 963, Cadillac V-Series.R, Alpine A424, BMW M V8 Hybrid, Lamborghini SC63

## VENUES

**2 new venues:**

Losail (Qatar), Imola (Italy)

**2 returning venues:**

Sao Paulo (Brazil), CoTA (USA)

## QUALIFYING

**New format,**

with two sessions per class: Qualifying (12 minutes), followed by a Hyperpole shootout, featuring the 10 fastest cars from Qualifying (10 minutes).

## 2024 CALENDAR

<b>R1</b>	<b>QATAR 1812 KM</b>	March 2
	(Qatar, Losail)	
<b>R2</b>	<b>6 HOURS OF IMOLA</b>	April 21
	(Italy)	
<b>R3</b>	<b>6 HOURS OF SPA-FRANCORCHAMPS</b>	May 11
	(Belgium)	
<b>R4</b>	<b>LE MANS 24 HOURS</b>	June 15-16
	(France)	
<b>R5</b>	<b>6 HOURS OF SAO PAULO</b>	July 14
	(Brazil)	
<b>R6</b>	<b>LONE STAR LE MANS</b>	September 1
	(Texas, USA)	
<b>R7</b>	<b>6 HOURS OF FUJI</b>	September 15
	(Japan)	
<b>R8</b>	<b>8 HOURS OF BAHRAIN</b>	November 2
	(Sakhir)	

## FIA WEC TIRE REGULATIONS

### SPECIFICATIONS

Number of specifications for dry-weather tires			Number of specifications for wet-weather tires
Le Mans 24 Hours	Other races	Total over the season	
3	2	3	1

Two slick specifications for the season for all cars, to be registered 48 hours before the Prologue Test. For individual races, two of the three specifications to be nominated 48 hours at the latest prior to the start of scrutineering (three specifications for Le Mans).

### ALLOCATIONS

Free Practice	Hyperpole*	Qualifying + Race		
		6-hour races	8-hour races	10-hour races*
12	4	18	26	32

(\*) Or of 1812km.

(\*\*) Only the softest tire proposed by the tire manufacturer for this competition will be used for Hyperpole.

- The tire manufacturer must establish identical technical requirements (pressure and camber) for all the Competitors. The non-respect of these requirements by the Competitors may be penalized by the Panel of the Stewards.
- For 29/34 tires: a random draw will be made per Competition and tires will be reattributed randomly to each Competitor by the Technical Delegates. These tires must be used in the "Qualifying + Race" allocation. The details will be defined by the WEC Committee.
- For 31/31 tires: a mechanism of collection and reintroduction of the tires will be defined by the WEC Committee.
- The WEC Committee will be able to modify the random attribution mechanism and the tire collection and reintroduction mechanism at any moment during the season.
- To go from the pit lane to the starting grid before the start of the race, the tires used can be either dry-weather tires or wet-weather tires and will not be counted in the allocation.

### HYPERPOLE

Michelin to select the compound for use in the Hyperpole sessions

The choice of compound for this session will be specified by Michelin, with all 10 cars contesting the shootout on the same type of tire. The four covers employed will be supplied in addition to the competitor's basic allocation but they may not be used for the race itself. Instead, the Hyperpole tires will be retrieved at the end of the session and will be made available to Michelin's partners for private testing at a later date.

### RAIN TIRES

The number of wet-weather tires usable during a Competition is not limited. During practices and the race, wet-weather tires can only be used once the track has been declared wet by the Clerk of the Course / Race Director.

Any chemical and/or mechanical treatment of the tires is prohibited, except for the removal of debris collected on the track.

The tread and profile of the tires must not be modified or recut.

Any process that involves a direct or indirect attempt at modifying the temperature of a tire (compared to the ambient temperature) is forbidden.

Use of storage tents in designated areas is permitted only if they are always ventilated with ambient air and accessible.

**Infringement of the tire allowance:** Stop & Go of 2 minutes per tire.

**Infringement of the tire heating rules:** Stop & Go of 3 minutes during the race.

**Four mechanics and two tire guns allowed** for wheel changes during pit stops. Wheel changes are only allowed when the car is not being refueled.

**Only one tire technician is allowed** to measure tire temperatures and pressures.

**Tire changes may only be carried out on the starting grid up to the five-minute board**, in front of the garage or inside the garage if significant work is being undertaken on the car, on the track in the case of a suspension of the race.

**Each tire 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.





***OUR VICTORIES,  
YOUR GAIN!***



## **MICHELIN PILOT SPORT**

Unbeaten in the FIA World Endurance Championship since 2012, you too can benefit from the grip and precision delivered by the MICHELIN Pilot Sport range of road tires!

**#PerformanceMadeToLast #WeRaceForChange**

From left to right, MICHELIN Pilot Sport (the Hypercar category in the World Endurance Championship), MICHELIN Pilot Sport<sup>4</sup> S, MICHELIN Pilot Sport<sup>6</sup>



**MICHELIN**