# MICHELIN *CrossClimate*


## PRESS KIT

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**michel.in/crossclimate/press**

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# MICHELIN *CrossClimate*

## CONFRONTING CHANGING WEATHER CONDITIONS.



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# THE NEW MICHELIN *CrossClimate* REPRESENTS A TURNING POINT

## Key information

In May 2015, European motorists will for the first time be able to purchase a summer tire that has been certified for use in winter.
Thanks to a combination of summer and winter tire technologies, the new MICHELIN *CrossClimate* delivers an appropriate level of safety in all weather conditions, throughout the year.

New, different and unexpected, the MICHELIN *CrossClimate* is the only tire that combines the benefits of summer and winter tires. It brakes in short distances on dry ground, has earned the top "A" rating in wet braking on European tire labels and is approved for winter use, indicated with the Three Peak Mountain Snow Flake (3PMSF) certification (displayed on the sidewall) indicating that it can be used in all seasons, even in countries that require special equipment for winter driving

And like all MICHELIN tires, the new MICHELIN *CrossClimate* also provides long mileage, energy efficiency, and a comfortable ride.

Recently added to Michelin's existing tire catalog, the new MICHELIN *CrossClimate* tire addresses an increasingly urgent need among European motorists to feel safer when faced with unstable, unpredictable weather conditions. Road conditions can change from one day to the next, during the same day or sometimes even in just a few hours. Rain and snow amplify drivers' need to be properly equipped in changing weather conditions, to ensure their safety and that of their loved ones. The new MICHELIN *CrossClimate* offers reassurance, making it possible to deal with changes in the weather. But above all, the new tire delivers total safety performance simply and economically. Motorists can drive the entire year in the most common weather situations, on just one set of MICHELIN *CrossClimate* tires.

The new MICHELIN *CrossClimate* is thus the fullest expression of the Group's strategy, MICHELIN Total Performance, which consists of delivering more performance in the same tire. This strategy informs all of the Group's research and development activities. To provide solutions that are best suited to user expectations and to ensure the relevance of its innovations, Michelin first conducts in-depth studies to understand how motorists use their equipment. To this end, the Group introduced a road usage laboratory in 2014. The MICHELIN *CrossClimate* is the result of this far-reaching knowledge and research process.


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# MICHELIN *CrossClimate*: THE ONLY TIRE THAT PROVIDES TOTAL SAFETY REGARDLESS OF WEATHER CONDITIONS

## Key information

The MICHELIN *CrossClimate* is the first tire that delivers an appropriate level of safety in all weather conditions – in summer as in winter.
The tire tangibly illustrates the MICHELIN Total Performance strategy. Understanding and innovating makes it possible to deliver more performance in a single tire.

Every day, motorists are faced with unexpected changes in the weather – rain, snow, temperature drops, etc. Currently available solutions and motorist behaviors are not fully resolving the issue. Studies conducted or commissioned by Michelin have shown that:

**65% of European motorists** use summer tires all year round (20% in Germany where regulations require special equipment in winter conditions, and **76% in France**, where there are no regulatory requirements), thereby compromising their safety in cold weather in the event of snow-covered or icy roads *(Source: GfK 2014 European consumer survey).*

**Four** in **ten** European motorists say that changing their tires with the seasons is an inconvenience and therefore avoid doing so for as long as possible *(Ipsos 2014/2015 survey of tire purchasing behavior)*.

Some refuse – or are just unable – to deal with the inconvenience or cost of equipping their car with winter tires in the winter.

Between **3%** (in Germany) and **7%** (in France) of motorists use their winter tires throughout the year, which adversely affects both dry braking, especially in hot weather, and fuel consumption *(Source: GfK 2014 European consumer survey)*.

The all-season tires available in Europe are less efficient than winter tires, especially on wet roads. According to the European tire labeling system, they are rated between "C" and "E" in wet braking. In addition, they are not sufficiently energy efficient to deliver fuel savings like summer tires. Many all-season tires on the market are rated between "C" and "F", whereas a MICHELIN Energy Saver+ tire is rated between "B" and "C".

Paradoxically, the largest markets for all-season tires are in countries, like Germany, that require equipment adapted to seasonal driving conditions. This clearly shows motorists' needs for simpler types of use. Even in countries with strict regulations, some motorists are looking for ways to avoid changing their tires twice a year. The requirement to change tires seasonally is viewed as a real inconvenience by one in two German motorists.

**62% of consumers in the United Kingdom and 47%** in France think they already have all-season tires although their vehicles are in fact fitted with summer tires. As a result, their tires are underperforming, without them even knowing it.


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Against this backdrop, Michelin is the first tire manufacturer to have combined summer and winter tire technologies in the same product, thereby increasing safety, simplicity of use and savings. The MICHELIN *CrossClimate* is the very first summer tire certified for use in winter. This means that it delivers the advantages of a summer tire in terms of dry or wet braking, energy efficiency and total mileage as well as the advantages of a winter tire with regard to traction and braking on occasionally snow-covered roads.

The MICHELIN *CrossClimate* illustrates the Group's commitment to freeing users from having to make seemingly difficult choices. Choosing one option often means abandoning another. Michelin doesn't accept this way of thinking and has focused its R&D teams on a different strategy, that of delivering more performance in the same tire.

**MICHELIN**
**Total Performance**

The challenge is to overcome design contradictions that, in theory, make it impossible to improve performance in opposing areas. To do so requires not only innovation, but also advanced technologies that allow the solution to be duplicated on an industrial scale. This is the case with the MICHELIN *CrossClimate*, the first summer tire with winter-weather capabilities, which has just been added to the MICHELIN tire lineup in Europe.

On this basis, for motorists facing unexpected weather changes with occasional snowfall, MICHELIN *CrossClimate* offers the levels of grip, road holding, energy efficiency and durability expected of a MICHELIN summer tire, while maintaining winter performances comparable to those of a MICHELIN winter tire, particularly for traction and braking on snow covered roads.

Michelin recommends that drivers who frequently drive in snowy and icy conditions always use winter tires, which are designed for optimal performance in all winter conditions. The rubber compound and tire design ensure top quality performance on roads with snow or black ice, however, they are not suitable for driving in hot weather. These motorists should therefore change their tires for summer and winter use each year.

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# MICHELIN *CrossClimate*: OBJECTIVE PERFORMANCE BENCHMARKS

## Key information

Evaluated by three independent European testing organizations, TÜV SÜD, Dekra Test Center and UTAC CERAM, the MICHELIN *CrossClimate* demonstrates that it has a complementary role to play alongside the existing MICHELIN summer and winter tires ranges.

The tests show that the MICHELIN *CrossClimate* ranks exceptionally highly in three performance categories that are important for motorists facing unexpected weather changes:

### MICHELIN *CrossClimate* TIRE PERFORMANCE COMPARISON

| | BRAKING ON DRY ROADS [1] | GRIP ON WET BENDS [2] | CLIMBING A SNOW-COVERED HILL [3] |
|---|---|---|---|
| MICHELIN CROSSCLIMATE TYRE | ★★★★★ | ★★★★★ | ★★★★★ |
| SUMMER TYRE [4] | ★★★★★ | ★★★★½ | ★½☆☆☆ |
| WINTER TYRE [5] | ★★★½☆ | ★★★★★ | ★★★★★ |
| ALL-SEASON TYRE [6] | ★★★½☆ | ★★★★★ | ★★★★½ |

Rating according to test results (MICHELIN CrossClimate tyre results = indice 100)
CD corresponds to the critical difference of the tests (dispersion of test results)

| | | | | |
|---|---|---|---|---|
| ★★★★★ ≥ 100-Cd | ★★★★½ (95-Cd) to (100-Cd) | ★★★★☆ (90-Cd) to (95-Cd) | ★★★½☆ (85-Cd) to (90-Cd) | |
| ★★★☆☆ (80-Cd) to (85-Cd) | ★★½☆☆ (75-Cd) to (80-Cd) | ★★☆☆☆ (70-Cd) to (75-Cd) | ★½☆☆☆ (65-Cd) to (70-Cd) | |

DEKRA · UTAC GROUPE UTAC CERAM · TÜV SÜD

In the European tire labeling system, the MICHELIN *CrossClimate* obtains similar ratings to those of a summer tire in terms of energy efficiency and wet braking and, what's more, as a winter tire, it is approved, as shown by the 3PMSF (Three Peak Mountain Snow Flake) logo on the sidewall of the tire.

| | | MICHELIN CROSSCLIMATE | ALL SEASON - | MICHELIN SUMMER | MICHELIN WINTER |
|---|---|---|---|---|---|
| WET | EUROPEAN LABEL | A | C-E | A-B | B |
| RR | EUROPEAN LABEL | C | C-E-F | B-C | C-E |
| EXTERNAL NOISE | EUROPEAN LABEL | ) | )-)) | )) | )-)) |
| SNOW | CERTIFICATION | 3PMSF | 3PMSF | - | 3PMSF |

1. On the basis of TÜV SÜD tests, from 100 to 0 kph (from 62mph to 0mph), on sizes 205/55 R16 & 195/65 R15, between 11/2014 and 01/2015.
2. On the basis of TÜV SÜD tests, on sizes 205/55 R16 & 195/65 R15, between 11/2014 and 01/2015.
3. On the basis of TÜV SÜD tests, from 5 to 30 kph (from 3mph to 18mph), on sizes 205/55 R16 & 195/65 R15, 12/2014.
4. MICHELIN Energy Saver+ tyre, considered representative of the summer category on the basis of recommendations obtained in ADAC and AUTOBILD 2013 and 2014 summer tyre comparative tests.
5. MICHELIN Alpin 5 tyre, considered representative of the winter category on the basis of recommendations obtained in ADAC and Auto Motor und Sport 2014, comparative tests on winter tyres.
6. GOODYEAR Vector 4Seasons tyre, considered representative of the all-season category on the basis of recommendations obtained in ADAC 2011 and AUTOBILD 2011, 2012, 2013 and 2014 comparative tests.

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# MICHELIN DEPLOYS ITS LABORATORY FOR LARGE-SCALE ROAD USE

## Key information

Understanding, innovating and delivering are the three steps involved in producing MICHELIN tires.
Its better understanding of types of use and its exceptional innovation capabilities have enabled Michelin to deliver more performance in each and every one of its tires, for the benefit of motorists. This strategic process was used to develop the MICHELIN *CrossClimate*.

For Michelin, understanding motorist behavior is the cornerstone of its development process. That's why the Group set up one of the largest road usage laboratories in 2014. Deployed across Europe, it makes it possible to gather data directly from vehicles to determine how 2,800 different types of motorists really drive every day. The findings are added to the knowledge already stored at the Michelin Technology Center with the goal of increasing the solutions provided to drivers.

**Michelin's goal is to supply the tire most closely adapted to every type of use and to each driving style. The process to attain this goal involves three stages:**

### 1. UNDERSTANDING.

Tires are used in varied, complex conditions that have been identified and analyzed.

### 2. INNOVATING.

Innovation enables the ideal alignment of advanced technology and types of use. Every year, Michelin invests more than €640 million in its Research and Development programs, conducts 75,000 tests with consumers around the world and surveys approximately 11,000 tire buyers.

### 3. DELIVERING.

The tire solution developed and brought to market responds to the need for safety and the consumer's desire for simplicity, as well as to economic issues.

Understanding different types of use is the prerequisite for Michelin's approach to tire development. Tires must combine performance in areas that are meaningful to users. And therein lies the problem. North American motorists don't drive like their counterparts in Europe or Southeast Asia. They don't have the same cars, the same roads, or the same driving customs or habits. They are not subject to the same regulations. And they are not faced with the same weather conditions. Michelin takes into account all these specific features since the goal is to ensure that Michelin tires offer the best contact between the vehicle and the road.

That's the rationale behind the new MICHELIN *CrossClimate*, the latest addition to the catalogue of MICHELIN summer and winter tire lineups, all of which are still as important as ever.

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# A COMBINATION OF SUMMER AND WINTER TIRE TECHNOLOGIES: A MICHELIN INNOVATION ALREADY UNDERWAY

## Key information

The new MICHELIN *CrossClimate* features a combination of summer and winter tire technologies. The performance combination results from the innovative grouping of technologies in the tread involving the rubber compound, the tread design and the sipes.

The new MICHELIN *CrossClimate* offers performance comparable to that of MICHELIN summer tires, especially in dry and wet braking, and traction and braking similar to that of MICHELIN winter tires that make it possible to travel on snow-covered roads. It has obtained Three Peak Mountain Snow Flake (3PMSF) approval, as indicated by the logo on the sidewall, meaning that it can be used in countries that require special winter equipment at clearly defined times of the year. And like all the brand's tires, the new MICHELIN *CrossClimate* delivers superior total mileage and fuel efficiency while providing a comfortable ride.

**MICHELIN *CrossClimate* benefits from the innovative combination of three types of advanced technology for 3 interlinked tire parts: the design, the structure, the materials, and specially the rubber compounds, the design of the tread components, and the tread's new self-blocking sipes.**

**An innovative rubber compound:**
For the tread: an innovative material ensuring optimal grip. This specific material has the flexibility to enhance the rubber's ability to match every single variation in road surface, regardless of the temperature. Grip is optimized regardless of the conditions (snow-covered, wet, dry). Thanks to these characteristics, the MICHELIN *CrossClimate* obtained the best possible rating, "A", indicated on the European label, rating wet braking.

**A new material, under the tread,** improves the tire's energy efficiency due to its ability to resist heat build-up. Consider that with each rotation of the wheel, the tire is deformed under the weight of the load as it makes contact with the road. As its structure is deformed, the components heat up and some of the energy transmitted by the engine is lost. Michelin's engineers have been able to reduce this heat build-up by incorporating new generation silica into the rubber compound, thereby reducing fuel consumption with the MICHELIN *CrossClimate*.

**The combination of a unique V-shaped tread with new self-blocking 3D sipes.**
This variable angle unique V-shaped tread optimizes grip on the snow:
- For lateral forces thanks to the specific angle of the central part of the tread.
- For longitudinal forces thanks to the wider angle of the shoulder areas.

This V-shaped tread is combined with **new self-blocking 3D sipes**. Extremely wavy, varying in thickness and geometrically complex, these full-depth sipes have a "claw" effect on snow, thereby improving vehicle traction. The vertical and lateral waves in the sipes have a self-blocking function. This means that they work together to give the tread blocks greater rigidity. The tire is more stable as a result, no matter what forces are acting on it, whether longitudinal force when braking and accelerating or lateral force when cornering. This improves steering precision while at the same time enhancing dry road performance in general. Thanks to this combination of advanced technologies, the rigidity of the tread is improved, promoting both steering precision on dry roads and tire durability. It is for all these reasons, these observations of driver behavior, that the Michelin CrossClimate tire is a new offer that is comparable to no other. This blend of advanced technology, plus the presence of EverGrip™ technology in the shoulder, delivers excellent performance on snow, precision in the dry, and longevity.

**The innovative combination of beveled angles and highly effective sipes.**
The beveled angles on the rubber blocks guarantee optimal ground contact and thus improve braking performance on dry surfaces. Thanks to this innovative design, Michelin combines the addition of these beveled angles with complex full-depth sipes, ensuring quality braking and traction on snow.

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When it is brought to market in the spring of 2015, the new MICHELIN *CrossClimate* will be available in 23 different sizes ranging from 15 to 17 inches and covering 70% of cars sold on the European market. Other sizes are scheduled for introduction in 2016.

## MICHELIN *CrossClimate* — PASSENGER CAR TYRE

| | SIZE | INDEX | PROFIL | CAI | (5) | (6) | (7,8) | | LAUNCH DATE |
|---|---|---|---|---|---|---|---|---|---|
| **SERIES 65** | | | | | | | | | |
| 15" | 185/65 R 15 | 92 V | CrossClimate XL | 139354 | | A | | ≤69 dB ** | 01/05/15 |
| | 185/65 R 15 | 92 T | CrossClimate XL | 938485 | | A | | ≤69 dB ** | 01/05/15 |
| | 195/65 R 15 | 95 V | CrossClimate XL | 35491 | C * | A | | ≤69 dB ** | 01/05/15 |
| | 205/65 R 15 | 99 V | CrossClimate XL | 873211 | | A | | ≤69 dB ** | 01/05/15 |
| 16" | 215/65 R 16 | 102 V | CrossClimate XL | 234169 | | A | | ≤69 dB ** | 01/06/15 |
| **SERIES 60** | | | | | | | | | |
| 15" | 185/60 R 15 | 88 V | CrossClimate XL | 985163 | | A | | ≤69 dB ** | 01/05/15 |
| | 195/60 R 15 | 92 V | CrossClimate XL | 259352 | | A | | ≤69 dB ** | 01/05/15 |
| 16" | 205/60 R 16 | 96 V | CrossClimate XL | 240680 | | A | | ≤69 dB ** | 01/05/15 |
| | 205/60 R 16 | 96 H | CrossClimate XL | 465138 | C * | A | | ≤69 dB ** | 01/05/15 |
| | 215/60 R 16 | 99 V | CrossClimate XL | 118940 | | A | | ≤69 dB ** | 01/05/15 |
| 17" | 215/60 R 17 | 100 V | CrossClimate XL | 647279 | | A | | ≤69 dB ** | 01/05/15 |
| **SERIES 55** | | | | | | | | | |
| 15" | 195/55 R 15 | 89 V | CrossClimate XL | 33462 | | A | | ≤69 dB ** | 01/05/15 |
| 16" | 195/55 R 16 | 91 V | CrossClimate XL | 991974 | | A | | ≤69 dB ** | 01/05/15 |
| | 195/55 R 16 | 91 H | CrossClimate XL | 697221 | | A | | ≤69 dB ** | 01/05/15 |
| | 205/55 R 16 | 94 V | CrossClimate XL | 94665 | | A | | ≤69 dB ** | 01/05/15 |
| | 215/55 R 16 | 97 V | CrossClimate XL | 645395 | C * | A | | ≤69 dB ** | 01/05/15 |
| | 225/55 R 16 | 99 W | CrossClimate XL | 64556 | | A | | ≤69 dB ** | 01/05/15 |
| 17" | 215/55 R 17 | 98 W | CrossClimate XL | 675405 | | A | | ≤69 dB ** | 01/05/15 |
| | 225/55 R 17 | 101 W | CrossClimate XL | 295000 | | A | | ≤69 dB ** | 01/05/15 |
| **SERIES 50** | | | | | | | | | |
| 17" | 205/50 R 17 | 93 W | CrossClimate XL | 418868 | | A | | ≤69 dB ** | 01/05/15 |
| | 215/50 R 17 | 95 W | CrossClimate XL | 490037 | C * | A | | ≤69 dB ** | 01/06/15 |
| | 225/50 R 17 | 98 V | CrossClimate XL | 130561 | | A | | ≤69 dB ** | 01/05/15 |
| **SERIES 45** | | | | | | | | | |
| 17" | 225/45 R 17 | 94 W | CrossClimate XL | 58559 | C * | A | | ≤69 dB ** | 01/05/15 |

* For a majority of dimensions. Grading by dimension available by May.
** Grading by dimension available by May.

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# MICHELIN INNOVATIONS: MILESTONES IN THE WORLD OF THE AUTOMOBILE AND MOBILITY

## Key information

Michelin's development has largely been built on innovation. From the removable tire in 1891 to the first summer tire certified for winter use in 2015, Michelin's history has comprised innovations that are milestones in the enhancement of mobility for goods and people.

1946

### MICHELIN INVENTS THE RADIAL TIRE

MICHELIN invents the radial tire, which simultaneously enhances safety, triples longevity and improves energy efficiency by 30%, while providing a level of comfort without equal at the time.

1983

### MICHELIN INVENTS THE FIRST SIPED WINTER TIRE

MICHELIN invents the first siped winter tire, which simultaneously provides enhanced safety on snow-covered and wet, cold roads and greater traction on snow.


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1992

## MICHELIN INVENTS THE "GREEN TIRE"

The first MICHELIN green tire simultaneously reduces fuel consumption while improving grip on wet roads and tire longevity by integrating silica in the tread.

2003

## MICHELIN REINVENTS THE SPORTS TIRE

Introduced in 2003, the MICHELIN Pilot Sport 2 simultaneously provides more grip and enhanced safety thanks to its road-holding ability while delivering unparalleled driving enjoyment at all speeds.

2014

## MICHELIN INVENTS THE SELF-REGENERATING EVERGRIP™ TIRE

MICHELIN EverGrip™ technologies improve grip throughout the tire's life. Integrating a self-regenerating tread and innovative rubber compounds, the tire offers superior wet grip, mile after mile.


2015

## MICHELIN INVENTS THE FIRST SUMMER TIRE TO BE CERTIFIED FOR USE IN WINTER

The new MICHELIN *CrossClimate* features the unique combination of MICHELIN summer and winter tire technologies, thereby becoming the first tire that simply and economically provides an appropriate level of safety in all weather conditions, throughout the year.


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# MICHELIN KEY FIGURES

| | |
|---|---|
| COMPANY FOUNDED: | 1889 |
| PRODUCTION FACILITIES: | 67 plants in 17 countries |
| NUMBER OF EMPLOYEES: | 112,300 worldwide |
| TECHNOLOGY CENTER: | Over 6,600 people working in Research and Development in Europe, North America, South America and Asia |
| ANNUAL R&D BUDGET: | Over €640 million |
| ANNUAL OUTPUT: | 171 million tires produced, over 13 million maps and guides sold in more than 170 countries, and 1.2 billion itineraries calculated by ViaMichelin |
| 2014 NET SALES: | €19,553 million |

## AN EXTENSIVE PORTFOLIO OF BRANDS COVERING ALL MARKET SEGMENTS:

Michelin, BFGoodrich, Kleber, Uniroyal*, Warrior, Kormoran, Riken, Taurus, Tigar, Pneu Laurent, Recamic and Michelin Remix.

## MORE THAN 3,500 PROPRIETARY AND FRANCHISED OUTLETS IN 29 COUNTRIES.

Michelin, the leading tire company, is dedicated to sustainably improving the mobility of goods and people by manufacturing and marketing tires for every type of vehicle, including airplanes, automobiles, bicycles/motorcycles, earthmovers, farm equipment and trucks. It also offers electronic mobility support services on ViaMichelin.com and publishes travel guides, hotel and restaurant guides, maps and road atlases. Headquartered in Clermont-Ferrand, France, Michelin is present in more than 170 countries, has 112,300 employees worldwide and operates 67 production plants in 17 different countries. The Group has a Technology Center in charge of research, development and process engineering, with operations in Europe, North America and Asia. (www.michelin.com)


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* except in Europe