

Everything you need to know about tyres.

Tips and advice on staying safe.



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The most important part of your car is not the engine.

Car tyres are often seen as a more or less inconsequential part of the vehicle. This could not be further from the truth. Tyres are the only contact the vehicle has with the road.

In this leaflet we invite you to discover what tyres really are – a crucial, high-quality, expertly-engineered chassis component specially tailored to modern, high-speed cars. Not only do they have to match a variety of different suspension systems and respond accurately to steering commands, they need to roll smoothly and be durable. Above all, for vehicles to remain safely and securely on the road, tyres need to be able to cope with the forces exerted on them – when braking, accelerating or cornering. This is particularly important when the road is wet and slippery, or covered in snow or ice. So, with your safety in mind, here are some tips and advice to help you take care of your tyres.



Uncompromising safety: tyres from Continental.

Apart from setting new standards in handling and driving comfort, Continental tyres offer drivers considerable safety, thanks to cutting-edge technology. They ensure optimum transfer of power even in the most varied weather conditions, maximum steering precision and exceptional contact between the tyre and the road.

What makes all this possible? Decades of experience, close partnerships with the automotive industry, state-of-the-art production systems, a highly skilled workforce and our speed to market. All this has enabled us in previous years to uncover new potential, drastically shorten braking distances and further reduce the risks of aquaplaning.

The result: one of the safest tyres on the road today.

Useful tips for looking after and maintaining your tyres.

Continental tyres are high-tech products, finely tuned to modern day driving. Maintain your tyres properly and they will deliver excellent service.

As with all complex technical products, you should handle your tyres carefully. This way you can rely on optimum driving comfort and performance throughout the tyres' service life.

We recommend:

Inspect your tyres and check their pressure (including the spare) every two weeks. If tyre damage is suspected or found, have the tyre inspected immediately by your local tyre specialist.



Avoid damage.



Tyres can become damaged without the driver's knowledge. If you do discover or suspect damage, have the tyre inspected without delay by a tyre specialist.

We recommend:

If you have to drive over an obstacle, approach it slowly – as straight on as possible. Check your tyres regularly for exterior damage such as cuts, cracks or bulges.

Do not overstress your tyres.

Overstressing of tyres (excessive speed or overloading) is to be avoided. This has the same critical effect as under-inflation and can cause irreparable damage to the tyre.

We recommend:

Avoid overloading your vehicle. If you intend to drive under full-load/high-speed conditions adjust your tyre pressures according to the vehicle manufacturer's recommendations.

Check your tyre pressure regularly.

Tyre pressure plays a definitive role in the service life and safety performance of your tyres. Tyre pressures are determined individually for every vehicle model by the tyre and vehicle manufacturers. Refer to the owner's manual, the fuel tank cover, the car door or glove compartment to find the correct tyre pressure for your vehicle.

Under- or over-inflation reduces the tyre's ability to grip the road properly. Not only will this cause excessive or uneven tread wear, it has a substantial influence on handling, which can be particularly dangerous when cornering at high speeds.

If the inflation pressure is not adequate for the load being carried, the tyre temperature increases due to increased flexing. Excessive temperature can result in structural damage to the tyre and even to tyre failure.



We recommend:

Check your tyre pressure every two weeks and adjust as necessary. Remember, only check your tyres when they are cold, not when they are still warm from driving. Also, do not forget to check your spare or emergency/temporary spare tyre, since you never know when you may need it. Please refer to the vehicle manufacturer's supplementary information regarding emergency/temporary spare tyres.

Keep an eye on your tread depth.

Pay particular attention to the tread of the tyre – it has a strong impact on several performance criteria. An important factor is the tread depth of the tyre, which by law has to be a minimum of 1.6 mm¹. If you drive with less tread, you risk the possibility of a fine or penalty points on your driving licence.

Tread Wear Indicators (TWI's) are important tools for judging remaining tread depth. These are raised bars in the main longitudinal tread grooves, distributed evenly around the circumference of the tyre, which become level with the rest of the tread pattern once the legal minimum tread depth of 1.6 mm



Tread Wear Indicator

is reached. Continental's cold weather tyres have additional tread wear indicators which indicate when the tread depth reaches 4 mm because winter performance drops off substantially below this tread depth.

We recommend:

Since worn tyres greatly increase the risk of aquaplaning and impair wet braking performance², we strongly urge drivers to change their tyres before they reach the minimum legal tread depth.

A good rule of thumb to follow: change standard tyres when they have 3 mm and cold weather tyres when they have 4 mm of remaining tread.³

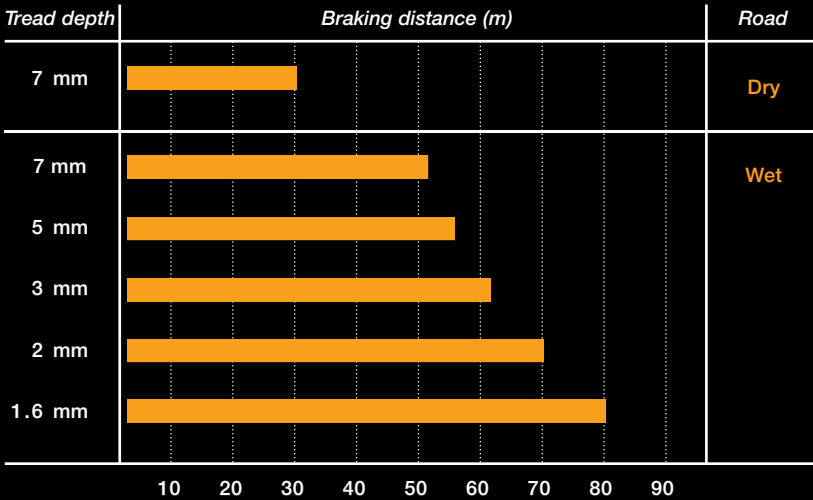
¹ Varies from country to country.

² Please refer to the chart on page 9.

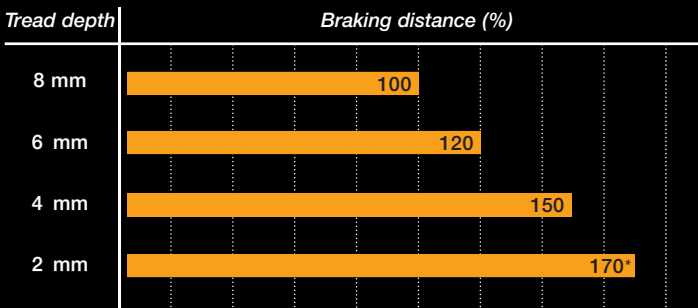
³ In Austria, cold weather tyres must have at least 4 mm of remaining tread when the period for mandatory winter equipment begins.

How the tyre tread depth affects braking distances.

Standard tyre braking comparison.
Braking from 62 mph to 37 mph.



Cold weather tyre braking comparison.
On a snow covered road. Based on 8 mm new tyre tread depth = 100%.



* In winter conditions, do not use cold weather tyres with less than 4 mm tread.

Have an expert check your tyres and vehicle regularly.

This means having your tyres balanced and the axle geometry checked. Regularly getting your tyres balanced – for example when changing from standard to cold weather tyres – ensures vibration free driving. Not only will the vehicle drive more smoothly, it reduces the wear on your tyres and on other parts of the vehicle suspension. Another positive aspect: you are increasing the safety for yourself, your passengers and other road users.

Sooner or later, you will have to replace your tyres.

The point at which a tyre is replaced is a decision for which the owner of the vehicle is responsible. They should consider factors including service conditions, maintenance history, storage conditions, visual inspections and dynamic performance. If you have any questions about the state of your tyres please talk to your local tyre specialist.

Tyres should be removed from service for any number of reasons, including tread worn down to minimum depth, damage or abuse (punctures, cuts, impacts, cracks, bulges, under-inflation, overloading, etc.). For these reasons tyres, including spares, must be inspected routinely, i.e. at least every two weeks. Regular inspection becomes particularly important the longer a tyre is kept in service. If tyre damage is suspected or found, Continental recommends that you have the tyre inspected by a tyre specialist.



Drivers are strongly encouraged to be aware of their tyres' visual condition. Also, they should be alert for any change in dynamic performance such as increased air loss, noise or vibration. Such changes could be an indicator that one or more of the tyres should be immediately removed from service to prevent a tyre failure.

We recommend fitting the same type of tyres (brand and tread pattern family) on all four wheels as this makes for superior handling and braking performance in all driving conditions.

We recommend:

Make sure all your tyres are from the same manufacturer and are from the same tread pattern family.

Never have a tyre fitted if you do not know its origin.

There is a potentially serious risk associated with the purchase of used tyres, especially those with an uncertain or unknown history. This applies to used tyres purchased as replacement tyres or as already equipped on a used vehicle. Used tyres may have been exposed to improper service, maintenance or storage conditions and may have damage that could eventually lead to a tyre failure.

Not all tyre damage or conditions that can lead to a tyre failure are outwardly visible. For instance, improper repairs or damage to a tyre's inner liner can only be observed through an inspection of the inside of the tyre, demounted from the wheel. A qualified tyre specialist should inspect the internal and external condition of a used tyre prior to application. If a used vehicle is purchased, its tyres should be demounted by the tyre specialist and inspected for conditions as recommended above.

We recommend:

Do not purchase, sell, or fit used tyres if you are not sure of their history.



Find out how old the tyre is.

The service life of a tyre is a cumulative function of the storage, stowing, rotation and service conditions, which a tyre is subjected to throughout its life (load, speed, inflation pressure, road hazard injury, etc.). Since service conditions vary widely, accurately predicting the service life of any specific tyre in chronological time is not possible.

So that you can check when the tyre was made, the major tyre companies use a common coding system. You will find this code on the sidewall of your tyre. On tyres made after 1999 the last 4 digits identify the date of manufacture. The first two of these 4 digits identify the week of manufacture. The last two numbers identify the year of manufacture. For example, a tyre marked 2207 was made in the 22nd week of 2007.

We recommend:

All tyres (including spare tyres) that were manufactured more than ten years ago should be replaced with new tyres, even if they appear to be usable from their external appearance and if the tread depth may have not reached the minimum legal limit.

Once temperatures drop below 7°C switch to cold weather tyres.

As winter approaches, drivers should start planning for whatever the weather may throw at them. If you need convincing, just listen to the weather forecasters. They predict that there will be a good mix of snow, ice, rain and dry spells. To cope with this, drivers need cold weather tyres which have been specifically designed for these types of weather conditions.

So, 'if the thermometer is at 7°C at best – it's time to give your standard tyres a rest.' The roads will normally be wet and slippery and cold weather tyres offer much better grip under these conditions than standard tyres. For your own safety, it's a good idea to change to cold weather tyres from Continental before the start of the season.



7°C

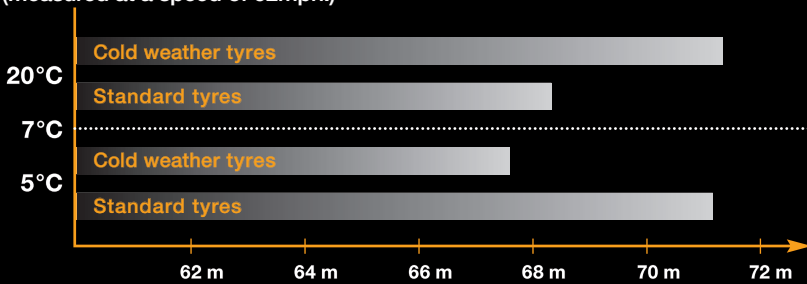
Excellent grip, whatever the weather.

Adapting your driving behaviour to wintry conditions helps, although cold weather tyres offer extra protection against unpleasant surprises during the cold season. Compared to standard tyres they offer increased safety – especially when braking – on cold wet roads as well as in snowy and icy conditions.

Braking in the wet.

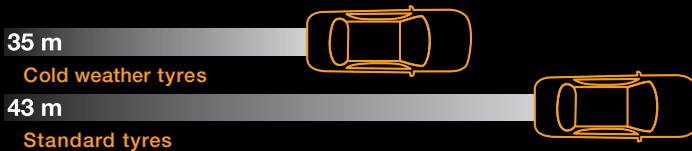
Cold weather tyres significantly reduce stopping distances at temperatures below 7 °C.

(Measured at a speed of 62mph.)



Braking on snow.

Measured at a speed of 30 mph.



The stopping distance data and comparison between standard and cold weather tyres shown here were obtained using standard vehicles. Graphics are for illustrative purposes only. The stopping distance of any individual vehicle depends on the vehicle type, the brakes, the tyres, the load, the temperature and the road surface.

Staying mobile even if the tyre has a puncture.

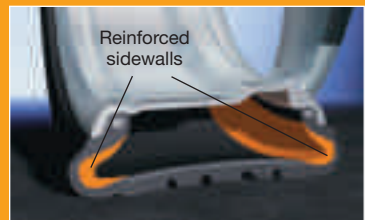
With innovative SSR tyres from Continental. Unlike conventional tyres, self-supporting runflat (SSR) tyres have reinforced sidewalls that can support the car even when all pressure is lost, preventing the tyre walls from becoming squashed between the wheel and the road.

Continued mobility thanks to reinforced sidewalls.

In the event of a puncture, SSR tyres allow drivers to continue their journey, providing the vehicle is driven appropriately and at a reduced speed.



Conventional tyres when all pressure is lost: tyre is destroyed within a short distance.



SSR tyres: continued mobility for up to 50 miles at a maximum speed of 50 mph.

Benefits of SSR:

- o No need to immediately change a deflated tyre
- o Lets you drive for up to 50 miles at up to 50 mph after pressure loss
- o Compatible with standard wheels
- o No need for spare wheel or jack



Important note:

The runflat properties of SSR tyres are so effective that you may not notice your tyres are deflated. Continental SSR tyres must be used only in conjunction with a fully functioning tyre pressure monitoring system (TPMS) and should only be fitted to vehicles for which they are approved by the car manufacturer. For complete instructions and information see www.continental-tyres.co.uk

The alternative to a spare wheel: the ContiComfortKit.



The ContiComfortKit provides a convenient, innovative alternative to carrying a spare wheel. Comprising a 12 V compressor and a special liquid sealant – conveniently packaged in a practical and compact emergency kit. With the ContiComfortKit everyday tyre damage such as damage caused by nails and objects on the road

can be temporarily sealed, and the tyre re-inflated on the spot.

Once sealed, you can continue to drive for up to a maximum of 125 miles, enabling you to reach a nearby tyre retailer or service station for a more permanent solution. The sealed tyre will need replacing or professionally repairing. Do not exceed speeds of 50 mph on tyres which have been sealed with the ContiComfortKit.

Benefits at a glance:

- o Practical and compact
- o Temporarily seals punctures, quickly & easily
- o You can drive for 125 miles at up to 50 mph on a sealed tyre

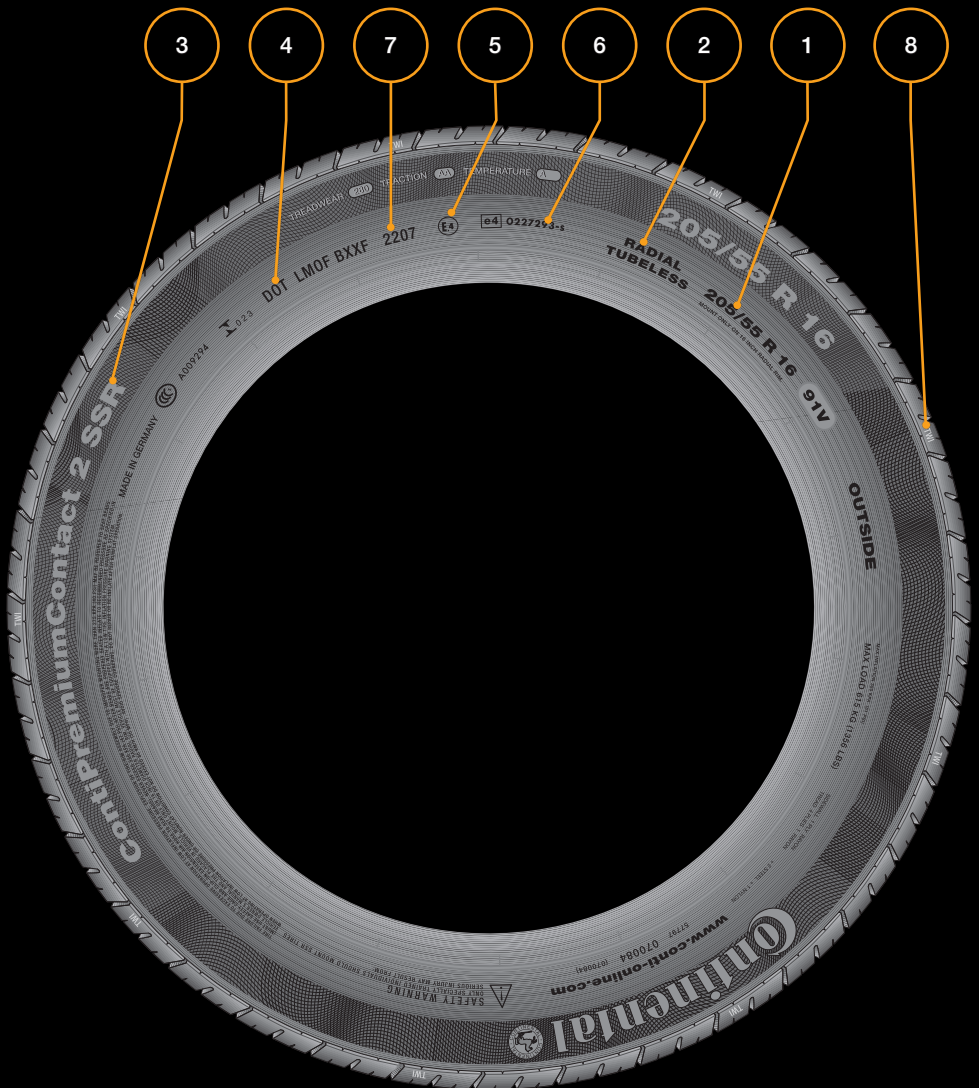
We recommend:

Avoid the danger and frustration of emergency roadside tyre replacements by using the ContiComfortKit.


Further information available at www.continental-tyres.co.uk

What the lettering on your tyre means.

The sidewalls speak volumes about the characteristics and origins of your tyres, so it is worth investing a few moments to get to know them. Here are the essentials:



The code on your tyre (e.g. 205/55 R 16 91V)

1	205/55 R 16 91V	<p>205 Nominal section width in mm</p> <p>55 Nominal aspect ratio (tyre height is 55% of tyre width)</p> <p>R Symbol for radial tyre</p> <p>16 Rim diameter code (in inches)</p> <p>91 Load Index "91" = max. load of this tyre is 615 kg</p> <p>V Speed Symbol, indicating max. speed V = 150 mph.</p> <p>Other information may be added after size marking: "REINFORCED" or "EXTRA LOAD (XL)" for reinforced tyres, "M+S" for cold weather tyres.</p> <p> Snowflake designation. This additional marking on an M+S tyre shows that the tyre meets prescribed test criteria and ensures good winter properties.</p>
2	TUBELESS	<p>Tubeless</p> <p>TUBE TYPE tyres must be fitted with tubes.</p>
3	SSR	<p>Special designation for SSR runflat tyres (Self Supporting Runflat)</p>
4	DOT	<p>DOT = Department of Transportation, USA</p>
5	E4	<p>Marking indicating compliance with ECE regulations. The number after the E in the circle indicates the country of homologation. (E4 = the Netherlands)</p>
6	0227293	<p>Approval number acc. to relevant ECE regulation</p>
7	2207	<p>Production code ("22" means 22nd week, "07" means 2007).</p>
8	TWI	<p>TWI = Tread Wear Indicator. Cross ribs evenly spaced around the circumference of the tyre in the main longitudinal tread grooves and which become level with the tread surface when the remaining tread depth is down to 1.6 mm.</p>

Speed Symbol
Maximum speed of tyre

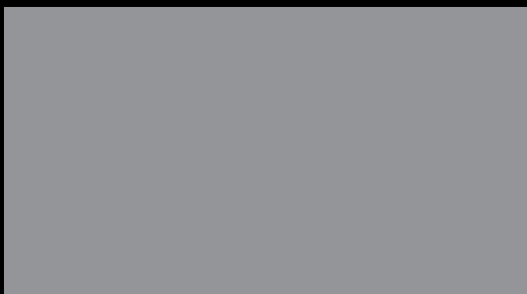
L	to 75 mph
M	to 81 mph
N	to 87 mph
P	to 94 mph
Q	to 100 mph
R	to 106 mph
S	to 112 mph
T	to 118 mph
U	to 125 mph
H	to 130 mph
V	to 150 mph
W	to 169 mph
Y	to 187 mph
ZR	over 150 mph

Load Index
Maximum load per single tyre

LI	kg	LI	kg	LI	kg	LI	kg	LI	kg
50	190	65	290	80	450	95	690	110	1060
51	195	66	300	81	462	96	710	111	1090
52	200	67	307	82	475	97	730	112	1120
53	206	68	315	83	487	98	750	113	1150
54	212	69	325	84	500	99	775	114	1180
55	218	70	335	85	515	100	800	115	1215
56	224	71	345	86	530	101	825	116	1250
57	230	72	355	87	545	102	850	117	1285
58	236	73	365	88	560	103	875	118	1320
59	243	74	375	89	580	104	900	119	1360
60	250	75	387	90	600	105	925	120	1400
61	257	76	400	91	615	106	950	121	1450
62	265	77	412	92	630	107	975	122	1500
63	272	78	425	93	650	108	1000	123	1550
64	280	79	437	94	670	109	1030	124	1600

Other alphanumeric combinations or symbols denote either compliance to international standards or indicates particular car manufacturer.

Your local dealer.



Find out more at www.conti-online.co.uk/passenger