Frequently asked questions ....

If you cannot find the answer to your question below, do please call on **07507 640 085** where a member of our Technical Staff will be more than happy to assist you.

Q - Can Puncturesafe hide or mask a dangerous puncture?

A - No! Absolutely not...

It is virtually impossible for **Puncturesafe** to hide or mask a dangerous puncture. Worldwide usage and countless tests which have been performed have shown that **Puncturesafe** will not seal a tyre that has received a puncture that would weaken the tyre's inner structure to a point that could be dangerous.

Puncturesafe does not have any of the failings that previous and many present products have. Apart from drying and balling up in the tyre, the biggest failings of traditional tyre sealants in a high speed tyre, was the inability to seal small holes, but the ability to seal a large dangerous hole or cut, because they contained large chunks of chopped up rubber. Whereas **Puncturesafe** contains only tiny strands of coarse surface synthetic fibres that are stronger than steel when they interlock tightly together, but will only positively seal small holes caused by puncturing objects up to 6mm in diameter, but only in a hole that is in the tread area of the tyre, and that is shrinking in size because there is no cord damage (rubber recovery), which is 95% of today's high speed punctures. Anything bigger, or in the sidewall, with or without cord damage, and the **Puncturesafe** fibres just slowly bleed through the hole, giving a controlled deflation, and usually with a halt or abrupt slow down in air pressure loss at the lower pressures of 10 to 15 psi (depending on cord damage) which prevents damaged rims, and helps the driver maintain control and possibly enabling continuation of the journey to remove the vehicle from a possibly dangerous location.

If a tyre receives a dangerous puncture, **Puncturesafe** allows air to bleed, providing additional time for the driver to bring the vehicle to a controlled stop. This safety factor can reduce potential blowouts from becoming a dangerous situation. Many security fleets utilise **Puncturesafe** for its ability to provide a high degree of safety and reliability rather than **Puncturesafe's** cost savings and tyre life extension qualities.

Q - Can Puncturesafe be used in all types of tyres?

A - Generally Yes!

Puncturesafe has been utilised in virtually every conceivable pneumatic tyre, accumulating millions of miles, in major fleets around the world, without any premature failure or adverse effects to the tyres or rims.

Special situations with low profile high performance tyres may require assistance and support from the **Puncturesafe's** Technical Department prior to installation.

Q - Will Puncturesafe attack or corrode steel belts?

A - No!

Puncturesafe's advanced proprietary seal and curing attributes have proven that the specialised rust inhibiting system protects steel belts against rust and corrosion.

The unique ability to cure within a puncture also protects the steel belts from outside contaminants. This proprietary attribute is available only with **Puncturesafe**.

Q - Can tyres treated with Puncturesafe be retreaded?

A - Yes!

Puncturesafe is compatible with all retreading methods.

Puncturesafe will retard aging in tyres. **Puncturesafe** treated tyres exhibit greater rubber resilience when compared to untreated control tyres.

Therefore, **Puncturesafe** increases the casings ability to achieve additional retreading. This increased retreadability provides a lower cost per mile. Your professional retread company certifies casing soundness and retreadability.

Q - Can Puncturesafe be used in tyres with tubes?

A - Yes!

Puncturesafe will seal punctures in both tube and tubeless tyres as long as there is rubber recovery and it is not a dangerous puncture.

A tube is not one of man's most ingenious inventions, and is very unreliable. The tube is basically made of rubber and synthetics. The wall thickness of a tube is not uniform and rubber content is very critical in terms of elasticity and rubber recovery. A tube that does not contain a sufficient amount of natural rubber cannot recover (close up) after sustaining a puncture. It is critical that there be rubber recovery to assure a positive secure seal.

by installing **Puncturesafe** into a tube, the problem of punctures can be reduced. The seal in a tube is not permanent. Tubes squirm inside a tyre at high speed if the puncturing object is left in the tyre and tube, it may rip the tube. Then even **Puncturesafe** may not able to help. We recommend that nails be removed on a routine basis and the tyres air pressure be maintained at maximum PSI to reduce the squirming.

When a tube is punctured, the size of the puncture in the tube may be much larger than the actual puncturing object; also tubes are very susceptible to ripping.

Q - Is Puncturesafe strictly for sealing a damaged tyre?

A - No!

Puncturesafe is a preventative maintenance tyre additive and was designed primarily to be utilised prior to a tyre receiving damage from puncturing objects and/or interior damage caused from operating tyres under inflated.

After installing **Puncturesafe**, the vehicle is driven a minimum of 3 to 5 miles (5 to 8 km), however it is not imperative to drive the vehicle immediately. For **Puncturesafe** to perform its preliminary functions, the tyre and **Puncturesafe** must go through an initial conditioning period, at which time **Puncturesafe** will have completely coated and conditioned the inner surfaces of the tyre/rim.

When a puncture occurs, the **Puncturesafe** coating encapsulates the puncturing object. When the puncturing object is removed or ejected, **Puncturesafe** is drawn into the puncture by the capillary action of the escaping air, the puncture closes up (rubber recovery) thereby trapping the **Puncturesafe** seal. The seal cures and becomes non water-soluble to protect the inner structure from outside contaminants.

The **Puncturesafe** seal is only as strong as the tyre and can not hide or mask a dangerous puncture.

Q - Can Puncturesafe maintain correct air pressure?

A - Yes!

Testing has proven without a doubt that **Puncturesafe** has the ability to eliminate porosity and air migration. Although **Puncturesafe** will maintain correct air pressure, we recommend that visual inspection be performed on a per trip basis and complete tyre examinations and air pressure inspections be performed at scheduled services.

Q - Does Puncturesafe extend tyre life and retard dry rot?

A - Yes!

Laboratory tests have proven without a doubt that **Puncturesafe** will retard aging within the inner structure of a tyre.

Testing has also proven that **Puncturesafe** will reduce heat and eliminate migrating air which is directly related to increased tyre and casing life.

Q - Will Puncturesafe seal sidewall punctures?

A - Yes & No!

However, It is important to realise that **Puncturesafe** cannot hide or mask a dangerous puncture.

Radial tyre sidewalls are much thinner in construction than the rest of the tyre. Even though there is some rubber recovery, if the puncturew has not weakened the structure of the tyre, it will seal.

If the puncture is dangerous, **Puncturesafe** is designed to bleed and the tyre will deflate in a slow controlled manner. Regardless of the tyre, the sidewall is the most vulnerable area. **Puncturesafe UK** does not guarantee positive secure seals on sidewall punctures.

Q - Will Puncturesafe eventually dry or ball up in the tyre?

A - No!

Puncturesafe protects against separation and formulation breakdown. Tyres exposed to normal operational temperatures and high speed will not cause **Puncturesafe** to break down.

Q - Will Puncturesafe last as long as the tyre?

A - Yes

Puncturesafe UK warranties **Puncturesafe** Tyre Life Extender/sealer for the legal tread life of the tyre.

Puncturesafe Tyre Life Extender/sealer has never failed to provide tyre protection.

Puncturesafe's proprietary formulation enables the sealant to withstand heat, sheer and stress resulting from centrifugal force emanating from a rotating tyre/rim.

Puncturesafe's abilities & performance is not diminished with speed, distance or time.

Q - Do you need to stir or mix Puncturesafe prior to installing?

A - No!

Puncturesafe is thixotropic and does not separate. In fact in-depth testing has proven that **Puncturesafe** continues to remain in a thixotropic state and does not separate or ball up.

Some tyre sealant marketers state that their sealant needs to be stirred or mixed prior to installing into a tyre.

Their statement, as follows, does not substantiate reliability;

Once the sealant is installed into a tyre, the tyre/rim assembly acts as a mixing machine and will keep their product properly mixed.

False! A spinning tyre/rim assembly creates centrifugal forces and will readily and permanently separate the solids from the liquids. Therefore this type of tyre sealant will become ineffective, in a short period of time.

Q - Must you fully deflate the tyre to apply Puncturesafe?

A - No!

Because of our specialist equipment, only a little air will be lost during installation, usually a couple of pounds, which can be corrected upon completion.

The only exception to this, is the DIY bottle, were it will be necessary to deflate the tyre fully.

Q - Does Puncturesafe have a shelf life warranty?

A - Yes!

Puncturesafe UK certifies that when stored in factory sealed original containers, out of direct sunlight and in a temperature range of -07°C to +35°C **Puncturesafe** may be stored for at least 5 years.

Q - Does Puncturesafe cause out of balance problems?

A - No!

Puncturesafe cannot create an out of balance situation. If the tyre and rim are properly balanced prior to installing **Puncturesafe** and neither is out of round, then there will not be a change in performance.

Puncturesafe does not balance tyres or rims. If a problem exists then **Puncturesafe** may aggravate the situation, which acts as a safety warning alerting the driver that there is definitely a tyre, rim and/or suspension problem.

Q - Is Puncturesafe compatible with tyre components?

A - Yes!

Puncturesafe's formulation is fully compatible with all components in any tyre.

Q - Will Puncturesafe rust or corrode rims?

A - No!

Puncturesafe's rust and corrosion inhibiting system continuously works to prevent rust or corrosion.

Puncturesafe cannot eliminate existing rust or corrosion, but will neutralise it and prevent any additional damage.

Q - Can tyres treated with Puncturesafe be repaired?

A - Yes!

Puncturesafe does not contain any adhesive or chemicals that would alter the tyre's integrity.

Puncturesafe is totally water-soluble in its liquid state and even when cured it can easily be removed from the interior of any tyre.

All major repairs are performed by simply wiping the puncture area with a damp cloth, then wipe dry and repair.

Q - Does Puncturesafe create a mess when a tyre is dismounted?

A - No!

Puncturesafe is a viscous gel-like liquid that does not flow like water. Approximately 80% of the minimum required application amount coats the entire inner surface of the tyre/rim. The remaining 20% is considered the reserve, which does settle to the bottom only when a tyre is stationary.

When dismounting a tyre containing **Puncturesafe**, there is not enough product collected at the bottom that would allow it to splash out.

If the mechanic breaks the bead prior to releasing all the air from the tyre, the **Puncturesafe** around the bead/rim attempts to prevent the air from escaping, resulting in a small amount of **Puncturesafe** blowing out, as the bead breaks away from the rim. To prevent this from happening, release all of the air pressure prior to breaking the bead.

Once a mechanic understands the simple basics on handling **Puncturesafe** there is never a problem.

Q - Will Puncturesafe seal large punctures?

A - Yes & No!

Puncturesafe seals punctures measured by the size of the puncturing object, not the size of the puncture.

Regardless of how small a puncture may be, if the puncturing object has extensively damaged the tyres integrity, the puncture will continue to bleed air and **Puncturesafe**. This is a safety factor designed into the proprietary **Puncturesafe**formulation.

Puncturesafe's high speed grade will seal punctures made by puncturing objects up to and including 6mm in diameter.

Puncturesafe's Extra Heavy Duty grade for slow moving off road vehicles will seal punctures made by puncturing objects up to 12mm diameter.

Q - Is Puncturesafe a permanent seal?

A - Yes & No!

The Tyre Industry claims that "permanent repair" refers to a tyre repair that is permanently attached to the puncture area by means of adhesives and/or vulcanisation.

Although **Puncturesafe's** seals are positive secure seals that remain airtight for the life of the tyre, **Puncturesafe** is not a glue or adhesive.

The proprietary formulation is designed to bleed air and **Puncturesafe** if a tyre has received major structural damage, therefore for safety reasons the permanency of a **Puncturesafe** seal is contingent on the integrity of the tyre.

Q - Does Puncturesafe protect steel belts from contamination?

A - Yes!

One of **Puncturesafe's** proprietary attributes is the ability to cure in a puncture and become non water-soluble. This phenomenon is how **Puncturesafe** permanently prevents corrosion on steel belts as it protects against outside moisture and contaminants from leaching into the puncture as the vehicle is driven.

Q - Is a Puncturesafe seal as good as a patch?

A - Yes!

In most cases, **Puncturesafe** is better than a patch, the reason being is that **Puncturesafe** is a preventative.

A patch is a repair that is performed after the tyre has gone flat and in most cases has been driven flat for some distance. Driving on a flat radial tyre even for a short distance will create extensive internal damage that is irreversible and normally goes unnoticed by the repair person.

Preventative Maintenance is always better and safer than an after the fact repair.

This enormous safety enhancement is a major factor in utilising **Puncturesafe** Tyre Life Extender/sealer as preventative maintenance.

Q - Does Puncturesafe run to the bottom of the tyre?

A - No!

Puncturesafe chemistry transforms the formulation into a unique gel state that seems to defy gravity, allowing it to cling to the entire inner surface of the tyre/rim.

There are no adhesives in the formula and **Puncturesafe** will not cause chemical changes to the tyre, which would void a tyre warranty.

This ability to coat the inner surface of both the tyre and rim is one of **Puncturesafe UK's** closely guarded proprietary secrets.

Q - Does Puncturesafe freeze in cold climates?

A - No!

Puncturesafe's operating temperatures are -35°C to +149°C

Puncturesafe will not freeze when operating a vehicle in cold climates. In extreme cold weather below -40°C/F, **Puncturesafe** will slightly thicken, but as the tyre heats up from normal road friction, **Puncturesafe** quickly returns to its normal viscosity.

Q - Is it difficult to install Puncturesafe?

A - No!

All of **Puncturesafe's** professional application equipment have been designed for "ease of use".

To install **Puncturesafe**, into tyres of an average passenger car or light truck requires less than 2 minutes per tyre, while a large truck averages 5 minutes per tyre.

Q - Is the amount of Puncturesafe in a tyre critical?

A - Yes!

In order for **Puncturesafe** to establish a complete coating throughout the entire inner surface of the tyre/rim and have a 20% reserve, it required that **Puncturesafe's** technical calculate the total inner surface of all tyre/rim combinations and the amount of **Puncturesafe** required per tyre/rim assembly.

Puncturesafe UK publishes application charts which lists all current tyre sizes and uses, with minimum and maximum amounts of **Puncturesafe** required per tyre. These charts are located in **Puncturesafe's** Technical Manual.

The specially designed manual and pneumatic pump equipment measures **Puncturesafe** as it's being injected into the tyre.

The manual pump measures 1 to 6 units of **Puncturesafe** per stroke.