



[www.salshield.com](http://www.salshield.com)

[www.puncturefix.com](http://www.puncturefix.com)

## **TECHNICAL SUMMARY**

### **Puncturefix, Puncture Safe**

#### **THE 3 UNIQUE ABILITIES, WHICH CAN ONLY BE FOUND IN PUNCTURES SAFE**

##### **1. The ability not to seal dangerous punctures: -**

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, is the inability to seal small holes, but the ability to seal a large dangerous hole or cut, because they contain large chunks of chopped up rubber. Whereas Puncturesafe contains only tiny pieces of rubber and strands of coarse surface synthetic fibres that are stronger than steel when they interlock tightly together, but will only permanently 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 excessive tyre rubber loss or cord damage (rubber recovery), which is 90% 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 continuation of the journey to remove the vehicle from a potentially dangerous location.

## 2. The ability to give full even coverage, throughout the whole inner tyre: -



In a high-speed tyre, traditional tyre sealants do not give 100% crown coverage. They usually only cover 60 to 70%, whereas Puncturesafe contains a very clever polymer gel which behaves like a glue but is not a glue, but has similar abilities to glue by allowing the Puncturesafe formulation to cling evenly over the whole inner tyre surface. It does this when the lateral movement of the vehicle throws the excess Puncturesafe over the whole of the crown area, then side-ways up the inner sidewalls of the tyre where the adhesion properties of the polymer gel enables it to stay firmly stuck over the entire crown area with maintained sidewall coverage for added heat dispersion to the rim. This heat dispersion to the rim is part of the reason the tyre's life is extended because of a cooler running inner tyre. The gel's ability to seal porosity leaks over the whole inner tyre thereby giving maintained tyre pressure is another reason the tyre life is extended.

The Thixotropic qualities of Puncturesafe's polymers also enable it to go from a thick gel to very thin liquid when the vehicle is at speed, and enabling the liquid to snap back into a thick gel when the vehicle comes to rest, so the product stays evenly coated on the inner tyre, instead of pooling on the bottom, which is most common with traditional sealants.

## 3. The ability to withstand the heat and stress in a tyre: -

Unlike inexpensive traditional tyre sealants, the Puncturesafe concentrated polymer gel formulation containing over 20 different high quality polymers will not separate, or ball and dry up because of the extreme heat and centrifugal forces that can be created in the hostile environment of a very high speed tyre. Puncturesafe has been formulated using a closely guarded manufacturing process to stay liquid in a high speed tyre for the whole lifetime of that tyre irrespective of its use.

**It is these 3 important safety qualities which have set us apart from others.....**