

## What is an extreme-performance tire sealant?

- Effectively and rapidly seals large punctures
- Effectively and rapidly seals slow leaks (leaks due to the tire's natural porosity, leaks around the valve stem, bead leaks, etc.)
- Single treatment lasts the life of the tire
- Does not separate
- Water washable
- Non-flammable
- Non-toxic
- Tires can still be repaired
- Freeze protected
- Does not react with or damage tires
- Does not react with or damage steel or aluminum wheels
- Sets the standard for integrity

# Is MULTI SEAL® Tire Sealant with KEVLAR® a preventative maintenance product or a flat fixer?

MULTI SEAL® Tire Sealant with KEVLAR® is intended to be a preventative product.

Put it in your tires now and enjoy 24/7 protection!

With that said, we do have customers that use MULTI SEAL® as a flat fixer.

Please remember: A tire that has been run while severely under-inflated is probably unsafe and definitely should be inspected by a professional.

## What are the benefits of MULTI SEAL® Tire Sealant with KEVLAR® to me?

The primary benefit is increased tire safety.

An underinflated tire is an unsafe tire! Positive side effects of maintaining proper tire pressure include:

- maximized tire life
- better fuel economy
- less catastrophic failures that lead to new tire purchases
- less collateral damage due to blowouts

Preventing flats also means you're far less likely to get stranded in the middle of nowhere ... or ruin your weekend. And it means you'll be able to get the job done, whether you're mowing the lawn, blowing snow off a driveway or towing equipment to a jobsite.

## Can I use MULTI SEAL® Tire Sealant with KEVLAR® in my passenger vehicle?

MULTI SEAL® does not recommend the use of our products in passenger vehicles or light-duty trucks/SUVs (including ½-ton trucks).

Does our product seal punctures and slow leaks in passenger car tires? Yes.

Is there a chance for high-speed vibration? Yes.

Does this happen in every passenger car tire? **No.** 

We are conservative in our approach, and we would rather sacrifice some business than have unhappy customers.

You may be asking yourself: Why would there potentially be high-speed vibration in passenger car tires treated with sealant? Many factors influence this, such as lighter construction of the tire, lower tire pressure, lighter vehicle weight, lighter construction of the suspension, tire deflection during road impacts and size of tire/road contact patch. In many cases, if the tire is slightly out of balance, the sealant can amplify the problem.

Frankly, we are wary of any sealant that recommends use in passenger vehicles. Also, in many cases, the recommended dosage is so small that you do not get effective tire coverage. Plus, don't be fooled by outrageous claims that a sealant has special ingredients that make it balance tires; the physics of *any liquid* at high speed in a passenger car tire is the same.

In addition to balance issues, MULTI SEAL® does not recommend the use of our sealant with Tire Pressure Monitoring Systems (TPMS). While some TPMS sensors in the industrial sector are liquid-friendly, most TPMS sensors in the passenger vehicle market are not.

Once again, MULTI SEAL® is conservative in our approach, and we do not want to risk an unhappy customer.

Beware of sealants that state they are "TPMS Safe," as this really depends on the type of TPMS and sensors. There is nothing magical that is added to make a sealant "TPMS Safe" ... a liquid is a liquid. Be sure to read the fine print.

# Does MULTI SEAL® make its own tire sealants?

#### Yes.

We manufacture our own tire sealants at our headquarters in Spring, Texas, USA. We are experts in tire sealants and the art of making an extreme-performance tire sealant. In fact, tire sealants are all we do! Keeping manufacturing in-house allows us to maintain control over all aspects of the process and to deliver the highest quality possible to our customers.

#### Who is MULTI SEAL®

MULTI SEAL® is an engineering-driven, second-generation family business dedicated to helping people save time, save money and stay safe. MULTI SEAL has been the world leader in industrial tire sealant technology for 35+ years, trusted by military and many of the most demanding industrial customers in the world. MULTI SEAL brings this same extreme performance to consumers with MULTI SEAL® Tire Sealant with KEVLAR®

## How does MULTI SEAL® Tire Sealant with KEVLAR® work to rapidly seal punctures?

MULTI SEAL® Tire Sealant with KEVLAR® is a high-tech system of fibers and "fillers" in a carefully designed liquid suspension. When a puncture occurs, the escaping air carries MULTI SEAL® Tire Sealant with KEVLAR® to the hole. The fibers cling to the side of the puncture and form a "filter" which entraps the fillers. Together, they form a plug, which seals the leak instantly with almost no air loss. As the tire flexes under load, the fiber/filler mass compresses to form a dense plug. The process will repeat itself for each additional puncture.

NOTE: There is absolutely no drying, curing or chemical reaction taking place. MULTI SEAL® Tire Sealant with KEVLAR® forms a mechanical/physical plug.

Also, the process is the same whether or not the penetrating object stays in the tire.

# How does MULTI SEAL® Tire Sealant with KEVLAR® seal leaks and prevent under-inflation caused by slow leaks?

Under-inflation in tires occurs:

- 1. naturally because of the porous nature of tire rubber
- 2. because of slow leaks around the rim
- 3. because of slow leaks around the valve stem

MULTI SEAL® Tire Sealant with KEVLAR® coats the inside of the tire, dramatically reducing porosity. As the sealant spreads around the tire and rim, slow leaks from the bead, pin holes in the rim and leaking valve stem problems are fixed in a similar fashion to punctures.

Because MULTI SEAL® Tire Sealant with KEVLAR® lasts the life of the tire, the need to frequently "air up" the tire is significantly reduced.

## How effective is MULTI SEAL® Tire Sealant with KEVLAR® at sealing punctures?

MULTI SEAL® Tire Sealant with KEVLAR® seals up to 95% of punctures in the tread area of most tires (i.e., tubeless tires).

For tires that have inner tubes, including some lawn mower and wheelbarrow tires, MULTI SEAL® Tire Sealant with KEVLAR® seals up to 70% of tread area punctures.

## Why is there a difference in the effectiveness between tubed and tubeless tires?

Effectiveness in tires that have tubes is lower for several reasons:

- In many cases, the tubes are very thin and cheaply made. These tubes rip when they get punctured, which makes them very difficult to seal.
- We also see a lot of tubes that are not properly sized for the tire: They're either too big or too small. This also can lead to ineffective sealing due to movement of the tube inside the tire or ripping.

## What about punctures in a tire's sidewall?

For low-speed applications, in most cases, if the sealant can get to the puncture, it will seal it.

For high-speed applications (i.e., vehicles traveling at over 45 mph), we recommend that any sidewall puncture be inspected by a professional.

Please keep in mind that the construction of a tire's sidewall is very different from the construction of the tread area, and there is a lot more flex, which makes it more difficult for the sealant to form a stable plug.

# Does MULTI SEAL® Tire Sealant with KEVLAR® damage wheels?

#### No.

MULTI SEAL® Tire Sealant with KEVLAR® contains a powerful anti-corrosion formula specifically designed to prevent rust and corrosion on ALL types of wheels — including steel, aluminum, painted or unpainted, coated or uncoated — as well as protecting the valve stem fitting.

MULTI SEAL® Tire Sealant with KEVLAR® will NOT fix an already rusty or corroded wheel — no sealant will. Prior to installing MULTI SEAL® Tire Sealant with KEVLAR®, make sure that the wheel is free of corrosion or rust. A corroded wheel is unsafe. Beware of any sealant that claims to remove rust.

# Does MULTI SEAL® Tire Sealant with KEVLAR® damage tires?

#### No.

MULTI SEAL® Tire Sealant with KEVLAR® does not affect tire rubber.

## Is MULTI SEAL® Tire Sealant with KEVLAR® flammable?

#### No.

MULTI SEAL® Tire Sealant with KEVLAR® will NOT catch fire. When MULTI SEAL® Tire Sealant with KEVLAR® is heated to a high temperature (by direct flame, spark, conduction or any other method), it simply boils away and does not burn.

### How long does MULTI SEAL® Tire Sealant with KEVLAR® last?

MULTI SEAL® Tire Sealant with KEVLAR® lasts for 10+ years ... or the life of the tire ... usually whichever is longer. MULTI SEAL® Tire Sealant with KEVLAR® will not dry out, separate or lose effectiveness, even after years of service, as long as the tire remains on the rim.

However, in unusually harsh conditions, getting a large number of punctures could cause the sealant to be "used up," since it does take some sealant to fix the wound each time.

### Does MULTI SEAL® Tire Sealant with KEVLAR® balance tires like some sealants claim?

MULTI SEAL® Tire Sealant with KEVLAR® does not claim to be a "balancer." (However, we have received anecdotal evidence from the field that our sealant can hydro-dynamically balance tires, such as those found on 18 wheelers. The mechanism of balancing is no different than any other product that claims to balance tires, such as balancing liquids / beads / powder. We have the added benefit of sealing punctures and slow leaks!)

NOTE: MULTI SEAL® Tire Sealant with KEVLAR® is NOT to be used with bead balancers or mixed with any other type of balancer.

The three key factors to ensure MULTI SEAL® Tire Sealant with KEVLAR® does not cause vibration in a vehicle are:

- 1. **Appropriate vehicle application**. For vehicles traveling at speeds over 45 mph, MULTI SEAL® recommends the use of our sealants in ALL trailers, as well as in vehicles with a minimum of ¾-ton payload.
- 2. **Correct sealant dosage**. Using too much sealant can potentially lead to high-speed vibration. Please strictly adhere to the recommended high-speed dosages given in our Application Chart.
- 3. Tires are balanced and wheels are true prior to installation of the sealant.

## How much MULTI SEAL® Tire Sealant with KEVLAR® do you put in a tire?

See the MULTI SEAL® Tire Sealant with KEVLAR® <u>Application Chart</u>, showing the amount to be installed in almost every tire size for on-road or off-road use. The quantities for each tire are carefully matched to the tire size to make sure that just the right amount is used to be effective during the life of the tire, while not over-treating. This results in the most efficient and effective level of treatment.

For tires not shown on the chart please contact us at 1-800-577-3353 or email us.

# How do I get MULTI SEAL® Tire Sealant with KEVLAR® into my tire?

See the installation instructions.

## Are tires treated with MULTI SEAL® Tire Sealant with KEVLAR® repairable and retreadable?

**Yes**, tires treated with MULTI SEAL® Tire Sealant with KEVLAR® are completely repairable and retreadable.

## Where can I find technical support for MULTI SEAL®?

Either call 1-800-577-3353 and ask for technical support or email us.

