

TIRE INFORMATION SERVICE BULLETIN

SEALANT TIRES

Introduction

Sealant as a mobility solution has grown in popularity among vehicle manufacturers in the past few years. It is a tire technology designed to temporarily seal punctures in the tread area up to a certain diameter and provide extended mobility. The tires are distinguished by material applied on the inner liner of the tire, in the crown area, at the time of manufacturing. The sealant typically is a sticky, gum-like material layer applied inside the tire in the tread area. Tire manufacturer's sealant solutions may vary in appearance, consistency, application method, care and service needs as well as limitations and instructions.

Sealant tires will typically be marked with a manufacturer's symbol on the tire sidewall indicating this feature and are compatible with all commonly available rim contours.

For vehicles originally equipped with sealant tires, we recommend maintaining sealant tires on all positions, since these vehicles may not have a spare tire. If a sealant tire needs to be replaced, replace it with a sealant tire to maintain the vehicle's extended mobility.

Use of sealant tires alone does not replace the need for regular inflation pressure checks with a gauge, even if a Tire Pressure Monitoring System (TPMS) is installed, at least once a month and before every long trip.

When a puncture or damage is discovered, a tire service professional should remove the tire from the rim for proper tire inspection. See the tire manufacturer's and USTMA guidelines for inspection, service and proper tire repair.^{1,2}

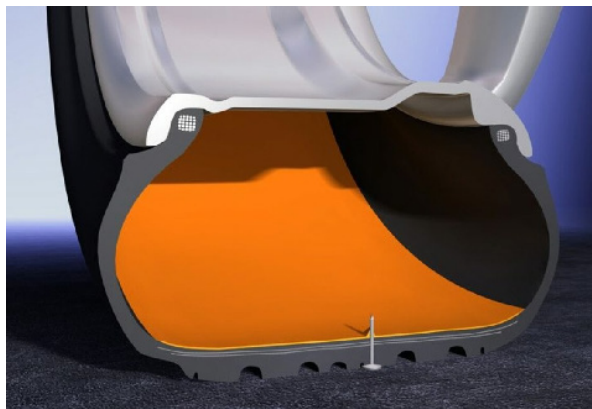


FIGURE 1: Example of sealant function



FIGURE 2: Example of sealant in tire

Tire Mounting / Demounting

It is recommended to handle these tires with special attention during mounting and demounting to avoid irreparable damage to the sealant layer, which may reduce its effectiveness to seal a puncture and may cause tire balancing issues. In case an object or debris becomes attached to the sealant material, it should be removed without damaging the layer.

Tire Repair

Punctures should be repaired as soon as possible even if no air loss is detected to prevent further damage to the tire. Puncture repair of a sealant tire is similar to a conventional tire repair. The tire service professional should follow the general rules for tire inspection and repair with the addition of the manufacturer's specific instructions to accommodate sealant repair.² Every tire must be removed from the rim for a thorough inspection of the interior and to assess continued use and repairability based on the tire manufacturer's recommendations for a tire with sealant technology. In addition, carefully inspect the tire, both exterior and interior, in order to identify previous punctures already sealed but never repaired.

To repair a tire with sealant technology, it may be necessary to use a scraper to remove a small round or square area of sealant (smallest amount possible to allow repair), without damaging the innerliner. Please refer to the individual tire manufacturer's recommendations regarding sealant tire repair and consult the USTMA wall chart ² for general tire repair instructions.

Vehicle original equipment temporary tire mobility kits may still be used with sealant tires, if needed, but are not a substitute for a proper tire repair. Refer to TISB 41 for more information.⁴

Sealant Tire Storage

Tires featuring sealant need to be stored following the same procedure as regular tires. See TISB 23 for tire storage recommendations.³

¹ See ["USTMA Care and Service of Passenger and Light Truck Tires"](#)

² See "Puncture Repair Procedures for Passenger and Light Truck Tires" Wall Chart

³ See TISB 23, ["Tire Storage Recommendations"](#)

⁴ See TISB 41, ["Tire Bead Lubricants, Mounting Aids, Bead Sealers, OEM Mobility Kits, Tire Sealants, Balancing Substances and Flammable Substances"](#)