



NEWSLETTER

Automotive Solutions

WINDSCREEN FIX & SEAL





Acceleration to the Future

At this point you may be asking yourself, “why is sealant chemistry important?” It comes down to how the chemistry of each type of sealant performs on a car when it is exposed to UV rays from the sun. In the presence of UV light, an organic material (polyurethane) will eventually revert to its natural state, thus changing properties and deteriorating over time. An inorganic material (silicone) will not.

While a polyurethane joint’s lifespan is typically 5-10 years, a silicone joint’s lifespan is typically 20+ years.

Why is there such
a big difference?



A silicone joint's lifespan is longer because, chemically, it won't break down. Like UV light, temperature plays a role too.

Silicone is better suited for temperature extremes. This is especially important in the Middle East where we have some of the most dynamic and extreme thermal cycles.

Changes in temperature cause the joints to expand and contract. Typically, the more flexibility the sealant allows the better.

Silicone allows for greater movement if that's what's necessary. What does this mean for the owner?

For a full system replacement, most manufacturers of polyurethane offer a 5 year warranty.

From a silicone manufacturer, you can get a 20 year warranty.

So, which one you should use?

SILICONE SEALANTS

- ✓ UV light stable. strong performance characteristics UV resistance, Temperature resistance, highest movement capability.
- ✓ Doesn't get hard when applied in cold environment.
- ✓ Maintain flexibility over time
- ✓ longer service life and continued flexibility over time (joint life span is typically 20+ years)
- ✓ Silicone surface do not degrade.

POLYURETHANE SEALANTS

- Organic products. Which are not UV light stable and break down in sunlight.
- Gets hard when in cold environment. This causes adhesion failure, even when adhesion looks good after a pull test.
- Lose flexibility when aging.
- joint's lifespan is typically 5-10 years
- Polyurethane sealants break down as organic product crack, craze, split and chalk. Dirt can be embedded in the cracks easily.



Acceleration to the Future

Al Muqarram Industry

introduce

Solutions for New Generation Automotive Industry

Dolphin Windscreen fix & Automotive body sealants

- A series of high quality **Modified Silicone** (Silyl-modified) sealants, moisture curing, solvent and isocyanate free. This product is mainly used for cars, buses, special vehicle windshield and side windows bonding between the main body.

KEY FEATURES

- Fine and Smooth appearance
- Flexible formulation
- Paintable one component sealant
- Superior UV resistance
- Non Hazardous
- Non- corrosive to metals
- Good adhesion in under water application
- Non- bubbling



AMI Research & Development team