Titan 7565 Instant Pipe Sealant Technical Data Sheet

Titan 7565 Instant Pipe Sealant

Description:

Cyberbond TITAN 7565 is a high performance, one-component anaerobic sealant designed for straight thread and tapered pipe threads. ***TITAN 7565*** is a creamy paste-like anaerobic compound that cures in the absence of air and in contact with metal. After cure, ***TITAN 7565*** has superior chemical resistance and the high lubricating properties of this compound prevents galling on stainless steel, aluminum and all other metal pipe threads and fittings. ***TITAN 7565*** lubricates and seals to prevent leaks in all metal sealing applications.

Features:

***Certified to ANSI/NSF-61 Section 6: Drinking Water System Components**

- Seals instantly to moderate pressures
- Fully cures at room temperature to burst pressure of most piping systems
- Will not crack or shrink because of solvent evaporation
- Superior resistance to a wide range of chemicals
- Controlled strength for easy disassembly
- High temperature resistance
- Locks pipe and fittings against vibration loosening, tampering, and variable temperature effects.

Typical Applications:

- Automotive
- Appliance
- Construction
- Fire Protection
- Plumbing
- Utilities
- Petroleum refining
- Chemical Process

Application and Use:

Apply sealant to the leading threads of the male fittings except for the first thread, which should be left free of sealant. Force sealant into the threads to thoroughly fill the voids. Best results will be obtained on fittings that are free of grease and oil. Assemble and wrench tighten fittings until proper alignment is obtained. Properly tightened fittings will seal instantly to moderate pressures. For maximum pressure and solvent resistance allow sealant to fully cure (24 hour or more depending on temperature).

Typical Properties of the uncured Sealant:

Chemical Type: Methacrylate Esters
Solids: 100%
Color: White opaque paste
Viscosity: 400,000 cps (mPas)
Specific Gravity: 1.15
Flash Point: > 95C
Shelf Life at 21C 12 Months
Typical Cured Performance (Tapered Threads):
1-Immediate sealing: Instant sealing is a function of the on-torque assembly, type of fitting, grade of fitting, part and ambient temperature among other items. The typical immediate or instant low pressure sealing capability of Titan 7565 is 1000psi (6.9Mpa) when hand assembled, and 3000psi (20.7MPa) when a 10in-lb (1.1 Nm) on-torque is applied.
2-Full cure sealing: Maximum sealing capabilities occur after full cure. Typically, this up to the burst rating of the pipe or fitting itself, which can be in excess of 40,000psi (275MPa). The time it takes to achieve full cure depends on substrate and the temperature. Full cure may take in excess of 24 hours at low ambient temperature and with inactive metals. Some typical examples of substrate activity are:

Super Active	Active	Inactive	Passive
Very Fast Cure	Fast Cure	Slow Cure	Primer necessary
Brass, Copper, Magnesium	Iron, Steel, Nickel, Aluminum	Stainless Steel, Titanium, Zinc, Anodized Aluminum	Ceramics, Glass, Plastics, Painted finishes

3-Chemical/Solvent Resistance:

Solvent	Temperature	% of initial Strength after 30 days immersion
Gasoline	88C	100
Motor Oil	88C	100
Brake Fluid	88C	98
Distilled Water	88C	100
Isopropyl Alcohol	88C	100
Perchloroethane	88C	100
Diesel Fuel	88C	100
Transmission Fluid	88C	100

4-Heat Resistance: Titan 7565 has an operating temperature range between minus 55C to 150C
Typical Cured Performance (Straight Threads):
The performance and locking strength on 3/8 inch (9.5mm) Zinc plated nuts and bolts is:
Fixture time: < 45minutes

Breakaway Torque 25 in-lb (2.8 Nm)
Prevailing Torque: 25 in-lb (2.8 Nm)
Compatibility:
Uncured Titan 7565 will soften and can damage thermoplastics including ABS, polycarbonate, vinyl, methacrylates etc. They will also soften varnish and lacquer finishes. It is compatible with all metals, glass, ceramics and thermoset plastics such as phenolic and polyester.
Titan 7565 is not recommended for pure oxygen or oxygen enriched systems and should not be used as a sealant for chlorine gas, liquid or other strong oxidizing systems.
Handling and Storage:
Titan 7565 should be stored in a cool place away from excessive heat, sunlight and low temperatures. Skin and eye contact should be avoided. Consult the MSDS for safety and protection information.
