Technical Data Sheet

Tigerhawk® 394 Threadlocker

November 2016

Product Description

Tigerhawk 394 is a high strength, oil tolerant anaerobic thread locking compound. Tigerhawk 394 is designed for the permanent locking of threaded fasteners. The product performs on aluminum, steel, plated fasteners, stainless steel, and special alloy parts. Tigerhawk 394 exhibits good temperature stability and is solvent resistant.

Typical Applications

Tigerhawk 394 will lock and seal large fasteners. Tigerhawk 394 is used in applications where shock and vibration may cause the fastener to loosen.

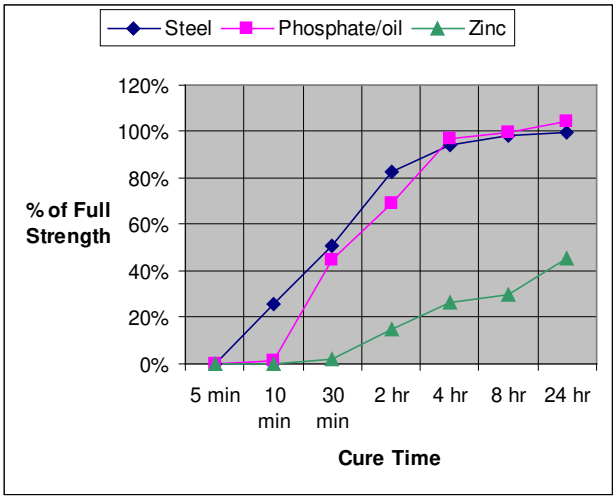
Properties of Uncured Material

Chemical Type	Anaerobic
Appearance	Red
Toxicity	Low
Solids	100%
Viscosity @ 25ºC, cPs Brookfield RVT, Spindle 3 @ 20 rpm	400-600
Specific Gravity	1.10

Typical Curing Performance

Cure Speed

The cure speed is depended on temperature and substrate. The graph below shows the Breakaway Strength on M-10 Steel, Phosphate/oil, and Zinc finishes.



Performance of Cured Material

	Typical Values
Fixture Time	5-20 min@ 72°F
Full Cure Time	24 hrs @ 72°F
Temperature Range	-60°F to 360°F (-51°C to 182°C)

Breakaway Strength

3/8" Plain Steel nut and bolt @24 hr	140-300 lb_f-in
3/8" Zinc plate nut and bolt@ 24 hr	200-350 lb_f-in
3/8" Oiled Steel nut and bolt @ 24 hr	100-250 lb_f-in
3/8" Phosphate nut and bolt @360°F	70-130 lb_f-in

Environmental and Fluid Resistance

(Shear strength values after 1,000 hours.)

	Typical Values
Heat age @ 150°C	100%
Engine oil @ 150°C	80%
Brake fluid @ 150°C	100%
ATF @ 150°C	100%
50/50 water/ethylene glycol @ 120°C	85%
Water @ 100°C	85%
Gasoline @ 25°C	100%
Diesel fuel @ 25°C	100%
Ethyl Alcohol @25°C	95%

Compatible Primers

Primers such as Tigerhawk Excel 8115 (Primer N) or Excel 8116 (Primer T) can be used to speed the fixture time of the adhesive. Fixture times can improve by as much as 50%. The use of primers can result in lower strength and performance should be tested after full cure.

General Information

Storage

Product should be stored in a cool and dry location at temperatures between 14°F (-10°C) to 86°F (30°C). Shelf life is 2 years from date of manufacture when stored at 72±8°F (22±4°C).

Note

Tigerhawk 394 is recommended for threaded components under 1" in diameter. Components can be disassembled using conventional hand tools. It is color coded red and once cured, seals and vibration proofs the assembly giving controlled breakaway and prevailing torques.

Health & Safety in use

IRRITANT: Contains Methacrylate Esters which may irritate eyes, respiratory organs and skin. In case of contact with the skin, wash immediately with plenty of water.