



Kraken Bond KS43 Pipe Sealant

Medium Strength

Kraken Bond KS43 Pipe Sealant Medium Strength is a medium viscosity and high strength anaerobic pipe sealant. Thixotropic formulation reduces run-off and migration of the product before assembly.

Advantages:

- It can be easily applied to threaded joints and removed easily with hand tools.
- The product resists very high temperatures after full curing

Usage Areas:

- With its specialized formulation, PS253 can be used applications where high pressure proof or oil resistance is required.

How to use:

- Clean male and female threads before assembly with an absorbent tissue paper to remove any cutting oil.
- Apply the adhesive with a 360 turn to leading threads of the male and female fittings.
- Use an absorbent tissue paper to wipe off excess jointing compound in the direction of the thread.

- Assembly parts and hold on for 24 hours at 71-75°F to ensure full curing of jointing compound.
- For disassembly, use hand tools to remove mating parts. When it is hard to disassemble at room temperature, apply local heat until reaching 482°F and disassemble while hot. Then, remove any residual cured adhesive mechanically and clean parts with a proper solvent, acetone.

Limitations:

- Keep product in its original container at 71°F and avoid to contact with direct sunlight. Storage below 41°F and above 86°F can negatively affect product properties.
- Material removed from its original container can be contaminated during usage which affects both adhesive performance and storage life. Therefore, do not return contaminated product to the original container.

Safety

Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Store in a well-ventilated place. Keep cool. Check MSDS guidelines for



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disposal and further information concerning safety.

Shelf Life:

The shelf life is 36 months if stored in unopened-original package in a dry place.

Packaging (Weight/Volume):

1,69 fl oz.

Physical & Chemical Properties

General Properties;

Basis: Methacrylate ester

Consistency (Uncured): Liquid

Viscosity: Medium and thixotropic

Strength: Medium

Physical Properties of Uncured Adhesive;

Specific Gravity: (71°F) 1.03

Flash Point: (ASTM D56-05) >199°F

Temperature Range: -58°F to +302°C

Corrosivity: Non-corrosive

Viscosity: (ISO 2555 Brookfield RVT, spindle 3) 7000 - 15000 cPs

Gap Filling: up to 0.1 inch

Typical curing performance of adhesive

Curing Time at Room Conditions: Various type of curing time of adhesive on several substrates are given as follows. Note that results can differ due to distance of bond gap and temperature.

Specimens: M10x25 bolt and proper nut

Condition: 71°F

Handling Time;

Brass: <30 secs

Steel: 2 to 4 mins

Stainless steel: 3 to 6 mins

Zinc plated steel: 15 to 30 mins

Aluminum: 20 to 35 mins

Average functional curing time: 1 to 3 hours

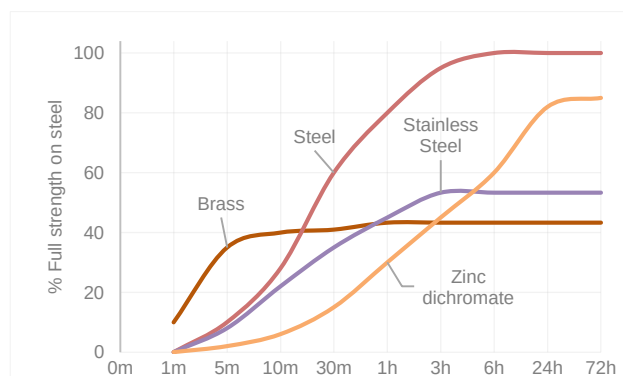
Average full curing time: 8 to 12 hours

Curing speed with different substrates: The curing rate of anaerobic adhesive greatly depends on type of surface material, substrate. The curing rate developed in time is determined by measuring breakaway torque of bolt and nut specimens. Test details and resultant graphs are given below.

Test Method: ISO 10964

Bolt and Nut Specs: M10x25

Condition: 71°F

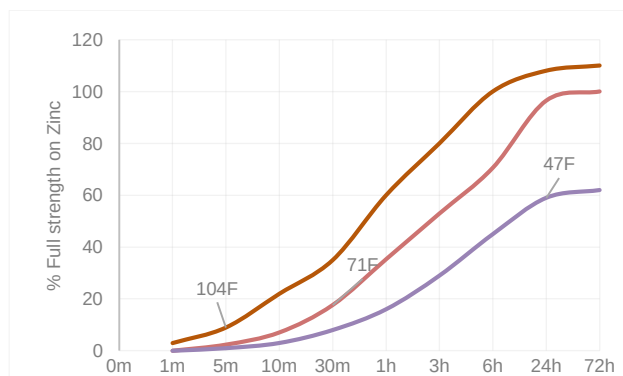




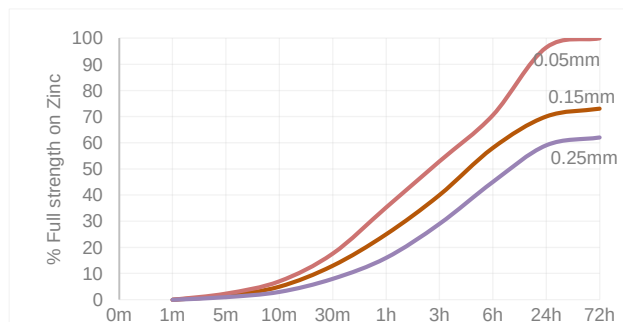
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Curing speed with different temperatures:
Temperature of medium has great impact on curing performance of anaerobic adhesive. The curing rate developed in time is determined by measuring breakaway torque of bolt and nut specimens. Test details and resultant graphs are given below.
Test Method: ISO 10964
Bolt and Nut Specs: M10x25
Condition: 71°F



Curing speed with different bond gaps:
Distance between two surfaces can significantly effect curing rate of adhesive. The curing rate developed in time is determined by measuring shear stress on the one surface of the specimen. Test details and resultant graphs are given below.
Test Method: ISO 10123
Conditions: 71°F



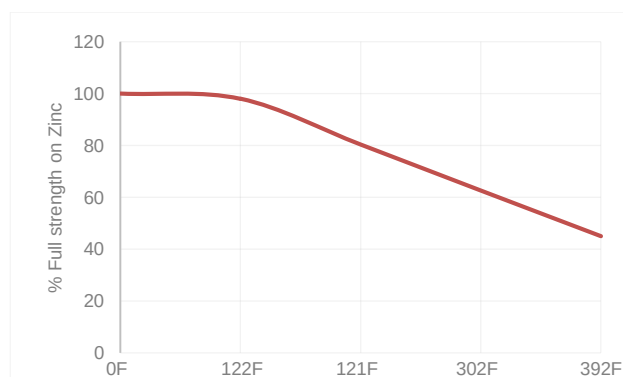
Typical performance of cured adhesive;
Test Method: ISO 10964
Specimens: Different type of nuts and bolts
Condition: 71°F

Unseated assembly cured for 24 hours;

Type of specimen	Breakaway Torque (T _{BA})	Prevailing Torque (T _P)
Zinc plated, M10	15 N.m	3 N.m
Stainless Steel, M10	12 N.m	2 N.m
Steel, M10	17 N.m	4 N.m

Resistance against Environmental Conditions;
Test Method: ISO 10964
Bolt and Nut Specs: Zinc plated, M10x25
Curing Condition and Duration: 71°F, 1 week
Torque test conditions (exception is hot strength test): 71°F
Torque type: Breakloose Torque (TBL)

Hot Strength: Strength is examined at various temperatures. The reference value of '% Full strength on zinc plated' is taken from previous tables corresponding 24 hours curing.





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Heat Aging: Strength is examined on specimens that are aged at different temperatures. The reference value of '% Full strength on zinc plated' is taken from previous tables corresponding 24 hours curing.

