

KR206

High Temperature Retaining Compound

Description

KR206 is a single component, high strength, high viscosity, thixotropic anaerobic retaining compound.

KR206 is designed for use on on cylindrical assemblies requiring a high service temperature. The thixotropic nature of the product prevents run off, dripping and migration after assembly.

KR206 cures rapidly when confined in the absence of air on close-fitting metal surfaces.

KR206 prevents corrosion of assembled parts.

Typical Applications

KR206 is designed to augment the strength of cylindrical assemblies and for use on loose-fitting or worn parts, where larger gap fill is required. Once applied, parts slip together easily, lubricated by the adhesive.

Typical applications include: bonding gears and pulleys on to shafts, bonding sleeves, pins and keys.

Technical Features

Chemical type:	Dimethacrylate
Appearance:	Green
State:	Liquid
Specific Gravity:	~1.07
Viscosity ¹ :	10,000 - 30,000 cPs
Viscosity ² :	5,000 - 10,000 cPs
Breakaway Torque ³ :	25 - 42 Nm
Prevail Torque ³ :	25 - 42 Nm
Shear Strength ⁴ :	15 - 32 N/mm ²
Initial Fixture Time ⁵ :	≤15 minutes
Max. Gap Fill:	0.40 mm
Full Cure:	24 hours
Flash Point:	> 100 °C
Shelf Life:	12 months @ 20 °C
Operating Temp. Range:	-50 to +230 °C

¹ Brookfield RVT, spindle 4, Speed 2.5rpm

² Brookfield RVT, spindle 4, Speed 20rpm

³ On M10 black oxide steel bolt and M10 bright steel nut, ISO10964

⁴ On steel pin and collar, ISO10123, 24hrs

⁵ ISO 10964

Typical Curing Performance

Typical curing speed ⁵ as % of final strength.

Time	Value %
15 Minutes (Fixture time):	~10
1 hour:	~50
24 hours (Full cure):	100

Factors Affecting Cure Speed

Cure speed can be negatively influenced by very large gaps, low temperatures and can be dependent on the substrates being bonded.

Heating the assembled parts accelerates the curing process.

When used on mild steel and brass components, anaerobic adhesives will reach full strength more rapidly than more inert materials such as stainless steel and zinc dichromate.

Anaerobic adhesives only cure in the absence of air and with metal part activation.

Anaerobic activator KP6497 should be used on plated parts or when the temperature is less than 5°C. The use of an activator can reduce bond strength.

Some anti corrosion chemicals inhibit the cure system in this type of anaerobic. Trials are recommended to establish whether cleaning of the parts is necessary.

All figures relating to cure speed are tested at 21°C.

Chemence recommends testing the suitability of Krylex products for any specific application.

Typical Environmental Resistance

Hot strength: KR206 is suitable for use at temperatures up to 230°C. At 200°C the bond strength will be ~50% of the strength at 21°C.

To achieve optimum high temperature performance, the product should be exposed to a temperature of 175°C for 30 mins

Heat ageing: KR206 retains over 95% full strength when heated to 100°C for 90 days then cooled and tested at 21°C.

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Chemical / Solvent Resistance

KR206 has good environmental resistance to water and other organic solvents including motor oil, ethanol and glycols.

KR206 is not recommended for use in pure Oxygen or Chlorine lines.

Limitations

KR206 is not recommended on certain plastics as stress cracking can sometimes result.

Instructions For Use

KR206 is suitable for high strength retaining applications that require large gap filling and high temperature service.

For best results, ensure parts are clean, dry and free from oil and grease.

KR206 adhesive should be applied manually to both surfaces.

Assemble parts use a rotating motion during assembly to ensure good coverage and allow to cure.

Wipe excess adhesive from outside of joint.

Product is normally hand applied from the bottle.

KR206 is suitable for use in dispensing systems for high volume assembly applications.

Storage

Optimal storage conditions are between 8°C and 21°C. Storage outside this temperature range can adversely affect product properties and may reduce the stated shelf life.

Please Note: When packed, KR206 requires an air space above the product to maintain stability.

Important: Product packed in bulk (>5kg) has a shelf life of 6 months. The material must be filled into smaller bottles / tubes within this time period.

General Information

For safe handling of this product consult the Safety Data Sheet.

Adhesive outside the joint will remain uncured and may be wiped away with a cloth.

Presentation

Bottles: 10ml, 50ml and 250ml.

Available in bulk for use with dispensing systems.

Notes

The data contained in this data sheet may be reported as typical value and / or range. Values are based on actual test data and are verified on a regular basis.

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