BONDING +
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ENCAPSULATION

Kisling

TECHNICAL DATASHEET

4453

(Retaining compound – High strength and high temperature resistance)

Description

Fast curing, high strength and heat resistant product, which retains cylindrical joints with excellent resistance against temperature and acids, alkalines and water.
Certified acc. to DVGW (DIN EN 751-1), WRAS BS 6920 and to ANSI/NSF Standard 61 for use in commercial and residential potable water systems. Complies with the guide formulation of the German Federal Environment Agency, published 2016, February 11th, for use in contact with drinking water.
4453 is NSF S5 (formerly P1) listed for use in food processing areas and BAM-approved for use in contact with pure oxygen up to 10bar and 60°C.

Advantages

- Fast curing (can be accelerated with activator as well)
- Resists high static shear stress conditions and dynamic loads
- Heat resistant up to 175°C
- Solvent-free, good chemical resistance

Physical properties (liquid product)

Chemical base	Diester of Methacrylic Acid
Curing System	Anaerobic curing adhesive
Shelf-life standard packaging (≤ 250 g)	12 months at room temperature
Flash point	>100°C
Viscosity at 25°C (Brookfield RVT) spindle 2, 20 rpm	450 – 650 mPa•s
Density	1.1 g/cm³
Colour	Green (fluorescent)
Max. thread diameter	M 20
Max. gap filling	0.15 mm

Curing properties

Measured on M10 x 20 bolt – grade 8.8 black phosphatized – nut 0.8d (no on-torque)

Initial strength at 23°C	2 – 6 minutes
Functional strength at 23°C	0.5 – 1 hour
Final strength at 23°C	2 – 4 hours

Physical properties (cured product)

Thermal range	- 55 °C up to 175 °C

Measured on M10 x 20 bolt – grade 8.8 black phosphatized – nut 0.8d (5 Nm on-torque) according to DIN EN 15865

Loose-break torque	> 25 Nm
Prevailing torque	> 40 Nm

Shear strength (DIN EN ISO 10123)	> 27 N/mm²

Precautions

For your own safety, please refer to the information of the concerned MSDS and for the correct handling the “user instructions”.

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