

## TECHNICAL DATASHEET

### ergo.<sup>®</sup> 4504

(ONE-4-ALL – low strength)

#### Product Description

Universal, low-strength, and thixotropic adhesive and sealant for metallic substrates. Covers the four main application areas of anaerobic adhesives and sealants in a single product:

- Thread locking
- Mounting of bearings in bushings
- Sealing of flange connections
- Sealing of pipe threads

#### Advantages

- Seals and secures in a single step
- One product – four application areas
- Low coefficient of friction – smooth assembly without friction losses
- Low strength – easy disassembly
- Solvent-free – no emissions
- Good chemical resistance

#### Physical properties (liquid product)

Chemical base	Diester of Methacrylic Acid
Curing System	Anaerobic curing adhesive
Shelf-life standard packaging ( $\leq 250$ g)	12 months at room temperature
Flash point	$>100^{\circ}\text{C}$
Viscosity at $25^{\circ}\text{C}$ (Brookfield RVT)	
spindle 6, 2.5 rpm	35'000 – 80'000 mPa•s
spindle 6, 20 rpm	11'000 – 21'000 mPa•s
Density	1.1 g/cm <sup>3</sup>
Colour	White
Max. thread diameter:	3 inches
Max. gap filling:	0.3 mm

### Curing properties

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

Initial strength after:	15 – 30 minutes
Functional strength after:	90 – 180 minutes
Final strength after:	~ 12 hours

### Physical properties (cured product)

Thermal range - 40 °C up to 175 °C

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

Loose-break torque:	5 – 7 Nm
Prevailing torque:	4 – 6 Nm

Shear strength (DIN EN ISO 10123) 4 – 6 N/mm<sup>2</sup>

### Precautions

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

The information in this data sheet is based on the results of our research and experience. However, the suggestions herein concerning the use, application, and processing of the products (collectively, „the methods“) **are non-binding recommendations only**. It is the user's sole responsibility to determine the suitability and safety of these methods, based on the user's particular purpose in using the products. Before relying on the reliability and safety of any parts that are bonded using the products, it is extremely important that the user test the reliability and safety of the parts that are bonded. Failure to do so could result in serious personal injury. Because of the use of the products are within the purchaser's sole control, Kisling Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose, arising from the sale or use of the products described herein. Kisling Corporation specifically disclaims any liability for consequential, incidental, or other damages of any kind, including lost profits. Kisling Corporation's liability for damages shall not exceed the purchase price of the products used.

TIS\_4504\_e/OT/12.06.2025