

Editing date: September 2012 Edition #:

Revision date: March 2015

Revision #: 01.

01.

SP 813

Oil resistant medium strength threadlocker

DESCRIPTION

SP 813 is an oil resistant medium-strength threadlocker, recommended for the use on threaded joints and couplings when a periodical disassembly is required. The product formulation allows an effective use also onto oil contaminated surfaces. SP 813 is highly resistant to temperature variation, corrosion, vibration, oil, fuels and many other chemicals.

The product properties can be used in a wide temperature range from -55°C up to +150°C including peak values of +200°C for short time.

DIRECTIONS FOR USE

Clean and degrease the surfaces carefully using a specific product. Apply a proper quantity of SP 813 avoiding excess. Wait for the curing time. Liquid product can damage coating and elastomers. Its contact with some kind of thermoplastics, even accidental, might induce delayed stress-cracking events. For applications on non-metal materials, please contact BB Technical Service. To disassemble use common tools. If possible, heat at 150-250 °C to make the dismounting easiest. Remove mechanically any residue of cured product and clean parts with acetone.

CURING PERFORMANCE

The curing time depends on the backlash existing between the coupled components, on the surfaces condition and on temperature. The functional strength is usually reached in 1-3 hours and the final strength in 24-36 hours. Applying on surfaces coated with protective and/or at low temperature, a shortest cure time can be obtained using a proper activator (please contact BB Technical Service).

CURING PROPERTIES

Zinc plated bolt M 10 x 20 - quality 8.8 - Nut h = 0,8 d at 25 °C

| Handling cure time | 10 -20 minutes | |
|---------------------------------------|------------------|--|
| Functional cure time | 1 - 3 hours | |
| Full cure time | 3 - 6 hours | |
| Shear strength (ISO 10123) | 18 - 23 Nm | |
| Locking torque (ISO 10964) breakaway | 9 - 16 Nm | |
| Locking torque (ISO 10964) prevailing | 9 - 13 N/mm² | |
| Temperature range | -55 °C ↔ +200 °C | |

HANDLING AND STORAGE

Keep product in a cool and dry storage not over than +25°C. To avoid contaminations do not refill the containers with the residues of liquid product remaining after use. For more information about the product applications, storage and handling, please contact BB Technical Service.

CHEMICAL RESISTANCE

Aging tests performed under the reported conditions, after 24 hours from the full polymerization at the specified temperature.

| Substance | °C | Resistance after 100 h | Resistance after 1000 h | Resistance after 5000 h |
|------------------|-----|---------------------------|----------------------------|----------------------------|
| Motor oil | 125 | Excellent | Excellent | Excellent |
| Gear box oil | 125 | Excellent | Excellent | Excellent |
| Gasoline | 25 | Excellent | Good | Good |
| Water/Glycol 50% | 87 | Excellent | Good | Good |
| Brakes oil | 25 | Excellent | Excellent | Good |

For further information about the product resistance to other chemicals, please contact BB Technical Service.

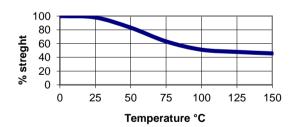
PHYSICAL PROPERTIES

| Composition | anaerobic methacrylate resin | |
|---|------------------------------|--|
| Colour | blue | |
| Viscosity (25°C - mPas) | 1.700 - 9.000 (thixotropic) | |
| Friction coefficient μ | 0,10 | |
| Specific gravity (g/ml) | 1,05 | |
| Fluorescence | under UV light | |
| Flash point | > 100 °C | |
| Shelf life | 1 year at 25 °C | |
| Max thread diameter / Max machining tolerance | M36 / 0,25mm | |

ENVIRONMENTAL RESISTANCE

The hereunder graph shows the trend of mechanical strength vs. temperature.

Steel specimen - ASTM 1002/DIN 53283



SAFETY AND HANDLING

Please consult Material Safety Data Sheet.

PACKAGING

SP 813 is supplied as 50ml bottle in 10 pcs box.

Note

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