

TECHNICAL DATA SHEET

BONDAN AN77

Revision: 03.03.2021
Version: 1.002



PRODUCT DESCRIPTION

BONDAN AN77 is a solvent-free, **medium to high strength**, anaerobic curing flange sealant. The sealant is well suited for all types of flanges (e.g. engine casings and gearboxes) as well as surface area applications such as pipe threads and connection pieces. In many applications BONDAN AN77 can be used to replace solid gaskets. Due to its medium strength disassembling is usually possible without damaging the components in case of repair.

The thixotropic product properties prevent from unwanted run-off when applying the adhesive and enables vertical and "overhead" applications.

When cured, BONDAN AN77 exhibits an excellent dynamic fatigue strength and good long-term temperature behavior. The product protects against leaks caused by shocks and vibrations as well as unintentional unfastening of the components.

TECHNICAL PROPERTIES

| | |
|-------------------------------|---|
| Color | yellow |
| Chemical basis | Dimethacrylate ester |
| Viscosity at 25 °C | ≈ 20000 – 60000 mPa·s (Brookfield, sp. 4, 6 rpm); thixotropic |
| Density at 25 °C (DIN EN 542) | 1.1 g/cm ³ |
| Max. gap | 0.25 mm or M36 |
| Fixture time (rt, M10): | |
| Zinc-phosphated | < 25 min |
| Stainless steel | < 25 min |
| Zinc galvanized steel | < 25 min |

The fixture time is especially influenced by the material surface, the gap and the curing temperature. In the case of passive surfaces and/or low temperatures, curing can be accelerated using the activator BONDAN AT91.

PROPERTIES IN THE CURED STATE

| | |
|---|------------------------|
| Locking torque (ISO 10964) | |
| Breakaway | ≈ 12 - 25 Nm |
| Prevailing | < breakaway torque |
| Compression shear strength (referring to ISO 10123) | ≈ 12 N/mm ² |
| Temperature range | -60°C/+150°C |

Chemical resistance (DIN 53287 – test method referring to DIN 54454)

Depicted is the relative strength in % after 1000 h exposure to the specific chemical

| | |
|----------------------------------|-------|
| water/ethylene glycol (87 °C) | 85 % |
| motor oil (MIL-L-46 152; 125 °C) | 95 % |
| gasoline (rt) | 95 % |
| brake fluid (rt) | 100 % |
| ethanol (rt) | 85 % |
| acetone (rt) | 90 % |

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DIRECTIONS FOR USE

- Please consult the safety data sheet before use.
- Clean, dry and grease-free surfaces ensure the maximum strength.
- Soiled surfaces must be cleaned (e.g. with BONDAN Cleaner or an appropriate solvent).
- Ensure sufficient flash-off time when cleaning parts.
- The curing time is especially influenced by the material pairing, curing temperature, gap and substrate surface.
- Dismantling and removal of adhesive residues can be facilitated by heating to 250 °C.
- This product is not suitable for application in an atmosphere consisting of pure oxygen or in highly oxidizing environments (e.g. chlorine).

STORAGE

- 12 months at 8 to 21 °C in unopened packaging
- Do not store in the refrigerator

PRODUCT LABELLING

See safety data sheet.

PACKAGE UNITS

- For manual application 50 g, 250 g

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