

GA-18

**FLEXIBLE, HIGH VISCOSITY,
ANAEROBIC GASKETING ADHESIVE**

TECHNICAL DATA SHEET

JUNE 2021



PRODUCT DESCRIPTION

Bostik Born2Bond™ Gasketing anaerobic adhesives are a single-component, cost effective alternative to conventional pre-formed gaskets on metal flanges. Flexible, durable and resistant to wear and tear, they can be used during installation or for preventative maintenance. Achieving 100% surface-to-surface contact, the adhesives create a cohesive, durable connection that can withstand vibration, extreme temperatures and exposure to oils, solvents and water. They also offer better stress distribution and, unlike traditional gaskets, do not require any 'bedding-in'.

GA-18 is a general purpose anaerobic gasketing material with high viscosity and medium strength. It is recommended for use on rigid iron, steel and aluminum flanges. Once cured the product prevents leakage and/or loosening of parts from vibration and shock.

This product is acceptable as a thread locking compound in and around food processing areas according to NSF S2 (Registration No.163873).

For more information, please consult <https://born2bond.bostik.com>

KEY FEATURES

- Medium strength
- High viscosity / Paste
- Flexible gasket
- Instant low pressure seal
- Outstanding fatigue strength
- Vibration resistant
- Corrosion prevention
- Prevents sagging and micro-movement
- Higher power transmission
- Single component
- Suitable for active and passive metals

DIRECTIONS FOR USE

1. For best results, clean all surfaces (internal and external) with Born2Bond™ Pre-Bonding Cleaner and wait until fully evaporated.
2. The product is designed for close fitting flanged parts with gaps up to 0.25 mm.
3. Apply manually as a continuous bead or by screen-printing to one surface of the flanges.
4. If the cure speed is too slow, use Born2Bond™ Anaerobic Activator.

5. Tighten flanges after application.
6. Cured product can be removed by using of Born2Bond™ Gasket&Adhesive Remover and a soft scraper.
7. Finish the cleaning process with a Born2Bond™ Pre-bonding Cleaner soaked soft cloth.

METHOD OF USE

Manual: Directly from the bottle with or without dispensing tips for more precise dispensing.

Semi-Automated: Use of pressure-time systems for accurate volume and larger series.

Full-Automated: fully automated robot or application lines.

APPLICATIONS

- Engines and powertrains
- Pumps and compressors
- Storage of liquids and gas
- Gearboxes and transmissions

STORAGE/SHELF LIFE

Store product in the unopened container in a dry area out of direct sunlight. Storage below 7°C or greater than 28°C can adversely affect product performance. If stored properly, this product has a shelf life of 18 months.

HEALTH/SAFETY

The Safety Data Sheet is available on the Bostik website and should be consulted for proper handling, cleanup and spill containment before use. Keep containers covered to minimize contamination.

LIMITATIONS

This product is not recommended for use in pure oxygen and/or oxygen-rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials. Material removed from containers may be contaminated during use. Do not return product to the original container. Bostik will not assume responsibility for product that has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or customer service representative.

PRODUCT CHARACTERISTICS

Basis Technology	Acrylic
Components	1K
Appearance / Color	Red
Cure	Anaerobic
Temperature use Range	-55°C to 150°C

UNCURED PHYSICAL PROPERTIES

Viscosity [Brookfield: Sp7 @20rpm @25°C]:	200.000 - 800.000
mPa.s Specific Gravity ASTM D1475 - 13(2020)	1.13

CURING PROPERTIES

The table below shows the curing properties of the product on mild steel according to ISO 10964

Fixture time @ 20°C	Up to 12h
Fixture time with Activator* @ 20°C	<2h
Full Cure @20°C	12h

*Bostik Born2Bond Anaerobic Activator

BONDING PERFORMANCE

The performance data reported below were measured according to ISO 4857 after curing for one week at 22°C (71.6°F).

Shear strength [ISO 4587 - mild steel]	>5 N/mm ²
---	----------------------

HOT STRENGTH

The data below shows the adhesive performance on grit-blasted mild steel (GBMS) at various temperatures. The adhesive was cured for one week at 22°C. The lap shear strength was tested according to ISO 4587. The strength test was performed after the specimen were heated for 30 minutes at the indicated temperatures.

Remaining Strength @ 150°C	35°C %
Remaining Strength @ 180°C	12°C %

CONVERSIONS

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\text{kV/mm} \times 25.4 = \text{V/mil}$$

$$\text{mm} / 25.4 = \text{in}$$

$$\mu\text{m} / 25.4 = \text{mil}$$

$$\text{N} \times 0.225 = \text{lb}$$

$$\text{N/mm} \times 5.71 = \text{lb/in}$$

$$\text{N/mm}^2 \times 145 = \text{psi}$$

$$\text{MPa} \times 145 = \text{psi}$$

$$\text{N-m} \times 8.851 = \text{lb-in}$$

$$\text{N-mm} \times 0.142 = \text{oz-in}$$

$$\text{mPa}\cdot\text{s} = \text{cP}$$

PRODUCT DISCLAIMER

Bostik offers this Technical Data Sheet ("TDS") for descriptive and informational use only. It is not a warranty, a contract or a substitute for expert or professional advice. Please also see the local product Safety Data Sheet for health and safety considerations.

The statements, technical information, data, and recommendations contained in this TDS are provided 'AS IS' and are not warranted or guaranteed in any way. They represent typical results for the products and are based on Bostik's research only. Since the conditions and methods of use of the products are beyond our control, Bostik expressly disclaims any and all liability and damages of whatever kind or nature that may arise from any use of the products, the results therefrom, or reliance on the information contain herein.

This TDS is one of several tools that may be used to help you find the product best suited for your needs. It is used at your own risk, and by using it, you are knowingly accepting and assuming any and all risks associated with its use and recommendations. BUYERS AND USERS ASSUME ALL RESPONSIBILITY AND LIABILITY FOR ANY AND ALL LOSS OR DAMAGE OF WHATEVER KIND OR NATURE ARISING FROM OR RELATED TO THE HANDLING OR USE OF BOSTIK'S PRODUCTS. The performance of the product, its shelf life, and application characteristics will depend on many variables, including but not limited to the kind of materials to which the product will be applied, the environment in which the product is stored and/or applied,

and the equipment used for application, among other things. Any change in any of these variables can affect the product's performance. You are responsible to test the suitability of any product in advance for any intended use or application. Bostik does not guarantee the reliability, completeness, use, or function of the statements, technical information, data, and recommendations contained in this TDS. Nothing contained herein constitutes a license to practice under any patent, and it should not be construed as an inducement to infringe any patent. You are advised to take appropriate steps to be sure that any proposed use of the products will not result in patent infringement.

The information provided herein relates only to the specific products designated and may not be applicable when such products are used in combination with other materials or in any process. The product is sold pursuant to a supply agreement and/or Bostik's Terms and Conditions of Sale, which set forth the sole warranty, if any, that applies to the product. **NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR WARRANTY OF MERCHANTABILITY, IS MADE CONCERNING THE PRODUCTS DESCRIBED OR THE INFORMATION PROVIDED HEREIN, AND TO THE MAXIMUM EXTENT ALLOWED BY LAW, SUCH WARRANTIES ARE HEREBY DISCLAIMED. BOSTIK DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW.**