

**PALM LABS ADHESIVES**  
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**TURBO SEAL - SERIES 50**  
**PURPLE FLEXIBLE GASKET MAKER**

TURBO SEAL SERIES 50 is an anaerobic gasket sealant, which develops medium strength in a short time. The compound cures in the absence of air between close fitting surfaces and will flex with minor flange movements. Provides resistance to low pressure immediately after assembly of flanges.

**Part Numbers for this TDS:** 50-050, 50-300

Applications:

- Typically used as a form-in-place pump gaskets, thermostats, compressors, transmission housings & axle covers.
- Ideal to seal against gases, water, LPG, hydrocarbons, oils and other chemicals.
- Thixotropic nature reduces the migration of liquid product after application.

**ADHESIVE PROPERTIES**

Composition	Dimethacrylate ester
Appearance	Purple
Viscosity cP	275,000 - 950,000 cps Thixotropic (Brookfield RVT @ 25°C Spindle 7 @ 20 rpm)
Specific Gravity	1.10
Flash Point	> 100°C
Solvent Content	None
Shelf Life	1 Year

**CURING PROPERTIES**

Handling Cure Time	15 – 90 minutes
Functional Cure Time	1 – 6 hours
Full Cure Time	1 – 12 hours
Shear Strength	4 - 9 N/mm <sup>2</sup> (ASTM D-1002)
Tensile Strength	8 - 23 N/mm <sup>2</sup> (ASTM D-2095)
Impact Strength	5 - 8 N/mm <sup>2</sup> (ASTM D-950)
Elongation of Cured Film	> 100%
Temperature Range	-65 to 300°F

**PHYSICAL PROPERTIES**

Coefficient of Thermal Expansion	K-1 80x10 <sup>-6</sup> (ASTM D 696)
Coefficient of Thermal Conductivity	0.10 W/(m-k) (ASTM C-177)
Specific Heat	0.30 kJ/(kg-K)

## CHEMICAL RESISTANCE

<u>Chemical</u>	<u>Temperature</u>	<u>% Initial Strength</u> <u>500 Hours</u>	<u>Retained</u> <u>1000 Hours</u>
Acetone	22°C	100	95
Ethanol	22°C	100	95
Motor Oil	125°C	100	100
Gasoline	22°C	100	100
Brake Fluid	22°C	100	100
Water/Glycol	87°C	90	85

### Directions for Use:

- For best results, clean all surfaces with a cleaning solvent and allow the solvent to evaporate.
- If the material is an inactive metal or the cure speed is too slow, spray with an Activator and allow to dry.
- Product is designed for flanged parts with gaps up to 0.25mm.
- Apply manually as a continuous bead or by screen-painting to one of surface flanges.
- Low pressure can be used when testing to confirm a complete seal immediately after assembly.
- Flanges should be tightened as soon as possible after assembly to avoid shimming.

### Storage:

Anaerobic adhesives are ideally stored in a cool, dry place in unopened containers at room temperature, 46°F to 86 °F. Do not return unused material to its original container.

PRECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the Warranty: All products purchased from or supplied by Palm Labs Adhesives are subject to terms and conditions set out in the contract. Palm Labs Adhesives warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Palm Labs Adhesives is consider accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Palm Labs Adhesives makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will nor infringe any patent.

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