# PALM LABS ADHESIVES

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# **TURBO SEAL - SERIES 78** WHITE CONTROL STRENGTH WITH PTFE THREAD SEALANT

TURBO SEAL SERIES 78 is a slow cure speed, medium strength anaerobic thread sealant designed for the locking and sealing of metal threaded pipes and fittings. The product cures rapidly in the absence of air between close fitting metal surfaces and provide low-pressure resistance immediately after application. It is ideal to seal against gases, water, LPG, hydrocarbons, oils and other chemicals. Excellent thixotropic property prevents migration of the sealant before or during curing.

**Part Numbers for this TDS:** 78-050, 78-300

## Applications:

- Ideal for locking and sealing of threaded metal pipes and fittings
- High temperature resistance. After 72 hours the joint is sealed to pipe burst pressure.

#### **ADHESIVE PROPERTIES**

Composition Appearance Viscosity cP Specific Gravity	Methacrylate ester White 350,000 cps @ 25 °C 1.21	(Brookfield RVT Spindle 3 @ 20 rmp)
Flash Point Solvent Content	> 100°C None	

#### **CURING PROPERTIES**

Handling Cure Time	60 - 120 Minutes				
Functional Cure Time	8 – 12 Hours				
Full Cure Time	24 Hours				
Breakaway Torque	>0.6 N.m. >5 lb. in.	(ISO 10964 M10 steel nuts and bolts)			
Prevail Torque	0.6 N.m. 5 lb. in.	(ISO 10964 M10 steel nuts and bolts)			
Compressive Shear Strength	> 0.5 N/mm <sup>2</sup> 70 psi	(ISO 10123 Steel Pins &			
Collars)					
Temperature Range	-65°F to 400°F				

### PHYSICAL PROPERTIES

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

### CHEMICAL RESISTANCE

		% Initial Strength	Retained	
Chemical	<u>Temperature</u>	500 Hours	1000 Hours	
Acetone	22°C	95	95	
Ethanol	22°C	95	95	
Motor Oil	125°C	90	70	
Gasoline	22°C	90	90	
Brake Fluid	22°C	100	100	
Water/Glycol	87°C	90	85	

Application Method:
Surfaces should be dry, clean, and free of any contamination. Apply 3600 bead of product to the leading threads of the male fitting, leaving the first thread free. Force the material into the threads and voids, adjust product amount accordingly and apply a 3600 bead of product on the female threads also. Assemble and tighten as required.

Anaerobic adhesives shall be ideally stored in a cool, dry place in unopened containers at a room temperature between 46° F to 82°F. Please do not return any unused material to its original container.

RECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin initiation 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.