

**TURBO SEAL SERIES 55 BROWN
FINE THREADS HYDRAULIC THREAD SEALANT**

TURBO SEAL SERIES 55 is a high performance anaerobic thread sealant designed for the locking and sealing of metal threaded pipes and fittings. The product cures quickly in the absence of air between close fitting surfaces and provides 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 and during curing.

Part Numbers for this TDS: 55-050

Applications:

- For locking and sealing of threaded metal pipes and fittings.
- Ideal for hydraulic and pneumatic connections.
- Low viscosity with medium strength sealing properties.

ADHESIVE PROPERTIES

Composition	Methacrylate ester
Appearance	Brown
Viscosity cP	400-600 cps (Brookfield RVT @ 25°C Spindle 3 @ 20 rpm)
Specific Gravity	1.06
Flash Point	> 100°C
Solvent Content	None

CURING PROPERTIES

Handling Cure Time	10 – 30 Minutes
Functional Cure Time	2 – 4 Hours
Full Cure Time	24 Hours
Breakaway Torque	15 N.m. 130 lb. in. (ISO 10964 M10 steel nuts and bolts)
Prevail Torque	9 N.m. 80 lb. in. (ISO 10964 M10 steel nuts and bolts)
Break Loose Torque	25 N.m. 220 lb. in. (Pre-Torqued to 5 N.m.) (ISO 10964 M10 steel nuts and bolts)
Max Prevail Torque	25 N.m. 220 lb. in. (Pre-Torqued to 5 N.m.) (ISO 10964 M10 steel nuts and bolts)
Compressive Shear Strength	> 6.5 N/mm ² 940 psi (ISO 10123 Steel Pins & Collars)
Temperature Range	-65°F to 300°F

PHYSICAL PROPERTIES

Coefficient of Thermal Expansion	80x10 ⁻⁶	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

<u>Chemical</u>	<u>Temperature</u>	<u>% Initial Strength</u> <u>500 Hours</u>	<u>Retained</u> <u>1000 Hours</u>
Acetone	22°C	80	80
Ethanol	22°C	100	95
Motor Oil	125°C	100	100
Gasoline	22°C	100	95
Brake Fluid	22°C	100	95
Water/Glycol	87°C	90	90

Directions for Use:

Surfaces should be dry, clean and free of any contamination. Apply 360° 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 360° bead of product on the female threads also. Assemble and tighten as required.

Storage:

Anaerobic adhesives are ideally stored in a cool, dry place in unopened containers at room temperature, 46°F to 82°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.

Palm Labs Adhesives

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