PALM
LABORATORIES TECHNICAL DATA

TURBO SEAL SERIES 65 PURPLE
PNEUMATIC HYDRAULIC THREAD SEALANT

TURBO SEAL SERIES 65 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: 65-050

Applications:

- For locking and sealing of threaded metal pipes and fittings.
- Ideal for pneumatic and hydraulic connections.

ADHESIVE PROPERTIES

Composition	Methacrylate ester
Appearance	Purple
Viscosity cP	14,000 cps (Brookfield RVT @ 25°C Spindle 3 @ 20 rmp)
Specific Gravity	1.20
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	2 N.m. 20 lb. in. (ISO 10964 M10 steel nuts and bolts)
Prevail Torque	2 N.m. 20 lb. in. (ISO 10964 M10 steel nuts and bolts)
Break Loose Torque	5 N.m. 44 lb. in. (Pre-Torqued to 5 N.m.) (ISO 10964 M10 steel nuts and bolts)
Max Prevail Torque	5 N.m. 44 lb. in. (Pre-Torqued to 5 N.m.) (ISO 10964 M10 steel nuts and bolts)
Compressive Shear Strength	> 1.5 N/mm^2 220 psi (ISO 10123 Steel Pins & Collars)
Operating Pressure PSI	10,000
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

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

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.

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