

TECHNICAL DATA SHEET

High Temperature Pipe Sealant with PTFE



Cyclo Industries, Inc C-56750

401 Maplewood Dr • Jupiter, FL 33458 • 561-775-9600

PRODUCT DESCRIPTION

Cyclo® High Temperature Pipe Sealant with PTFE is formulated for fast, responsive curing on metal pipe threads and fittings. This sealant is a smooth, white paste-like compound that controls lubricity to assist assembly and torque tightening. Cyclo® High Temperature Pipe Sealant with PTFE replaces Teflon® tape or pipe dopes. It cures rapidly to withstand 10,000 PSI within 24 hours. Prevents galling and protects mated threaded surfaces from rust and corrosion. The product cures when confined in the absence of air between close fitting metal surfaces. This product may not be compatible with some thermoplastic materials.

PRODUCT BENEFITS

- Quick fixture time
- Prevents galling and corrosion
- Controlled strength
- Temperature and solvent resistance
- Immediate low pressure sealing
- Contains PTFE

TYPICAL APPLICATIONS

Recommended for sealing metal tapered pipe threads and fittings up to 5cm (2 inches) National Pipe Thread (NPT) for industrial applications in the chemical processing, petroleum refining, pulp/paper, waste treatment, textile, utilities/power generation, marine, automotive, industrial equipment, gas compression and distribution industries. It is also recommended for industrial plant fluid power systems.

- Stainless steel fittings
- Head bolts into through holes
- Oil PSI sending units/sensors
- Fuel fittings
- Oil and coolant lines
- Hydraulic line fittings
- Brake fittings
- Transmission fluid fittings
- PTO fittings
- Air conditioning fittings

DIRECTIONS FOR USE

1. For best performance, surfaces should be clean and free of grease.
2. Product should be applied to the thread engagement area in sufficient quantity to fill all engaged threads.
3. Use accepted trade practices to assemble and wrench-tighten fittings until proper alignment is obtained.
4. This product performs best in thin bond gaps

(0.05mm).

5. Very large thread sizes may create large gaps which will affect cure speed and strength.

6. For maximum pressure and solvent resistance, allow at least 24 hours for the product to fully cure before filling and pressurizing system.

7. This product is designed to give controlled friction (torque/tension ratio) during assembly.

PHYSICAL PROPERTIES OF UNCURED MATERIAL

	Typical Value
Appearance	White opaque paste
Odor	Acrid
Specific Gravity	1.10
Viscosity (cP)	300,000
Flash Point (T.C.C.) °F	>200
Chemical resistance	Gasoline, oil, water, glycol, hydraulic fluid, freon

CURED PROPERTIES (3/8 NPT, Cured 24 hours @ 75°F)

	Value
Pressure Resistance (psi)	10,000
Temperature Range (°F)	-65 to +400
Breakaway torque, ISO 10964 N*m (in.-lb.)	5 (44)

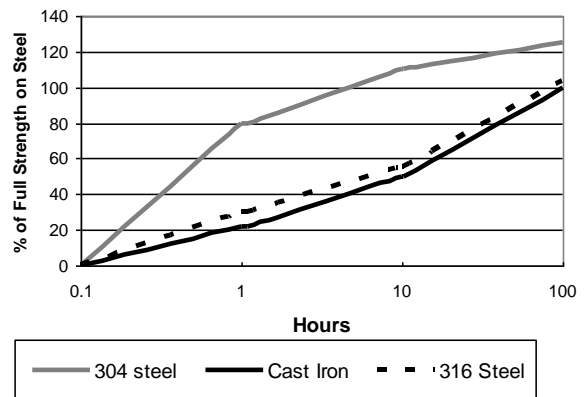
TYPICAL CURING PERFORMANCE

Cure speed vs. substrate

The rate of cure will depend on the material used. Cyclo® High Temperature Pipe Sealant with PTFE will react faster and stronger with **Active Metals**. However, **Inactive Metals** will require the use of an activator (Cyclo® C-930 Surface Preparation) to obtain maximum strength and cure speed at room temperature.

The graph below shows the breakaway strength developed with time on 1/2" NPT fittings compared to different materials.

Cure Speed vs Substrate



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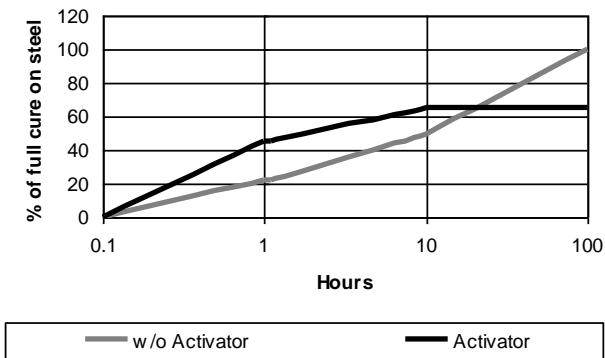
Cure speed vs. temperature

The rate of cure will depend on the ambient temperature. Full cure is attainable in 24 hours at room temperature, 22°C (72°F), or 1 hour at 93°C (200°F).

Cure speed vs. activator

Where cure speed is unacceptably long, or large gaps are present, applying an activator (Cyclo® C-930 Surface Preparation) to the surface will improve cure speed. The graph below shows the shear strength developed with time on 1/2" NPT fittings using Cyclo® C-930 Surface Preparation.

Cure Speed vs Activator



GENERAL INFORMATION

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. For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

ORDERING INFORMATION

Part Number	Container Size
C-56750	50 ml. tube

STORAGE

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container.

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