

TECHNICAL DATA SHEET

Poly-Tech 800

NON-SOLVENTED SPRAY ELASTOMER

poly-tech

COMPLETE ACID PROTECTION

Poly-Tech 800 is a medium performance, non-solvented polyurethane spray elastomer. It is characterised by a solids content of 100% and possesses good physical properties.

Poly-Tech 800 does not contain mercury catalyst.

Additionally it offers:

1. Convenient 1:1 (volume) mix ratio.
2. 100% solids - zero V.O.C.
3. Fast build for very thick requirements - reduced labour and time.
4. Fast curing for quick turn-around times - cost effective.
5. Hydrolytic stability and corrosion resistance.
6. Good general toughness.
7. Bonds to any substrate when the appropriate surface preparation and recommended primers are used.
8. Remains flexible and is therefore very suitable to handling expansion and contraction of metal associated with climate change or equipment that is subject to movement.
9. Requires plural component application equipment only.
10. Designed for industrial applications where elastomeric coatings/linings are specified.

PRODUCT SPECIFICATION

| | Part A | Part B |
|------------------------|--------------------|---------------|
| Colour | Clear, pale yellow | Cloudy yellow |
| Viscosity at 25°C (cP) | 1800 | 185 |

PROCESSING CHARACTERISTICS

- Store in a dry location as urethane components are susceptible to moisture contamination.
- In cold weather, the containers should be kept above 15°C to maintain them in liquid condition.
- Precondition drums at 25-30°C and apply at 50-60°C at the gun.
- The substrate should be at least 20°C or hotter.
- **The polyol should be thoroughly mixed by mechanically means using a stirrer inside the pail or drum first.** As the polyol is a blend of different components it requires mixing before use.

| | |
|--|----------|
| Mix Ratio, Part A : Part B (by volume) | 1 : 1 |
| Mix Ratio, Part A : Part B (by weight) | 100 : 89 |
| Pot Life at 25°C (seconds) | 12 |

Coating thickness of approximately 0.5-1 mm per pass is recommended. Several millimeters can be achieved very quickly by allowing 50-60 seconds cooling between passes.

| | |
|-------------------------------|------------|
| Light duty abrasive coatings | 1 - 2 mm |
| Medium duty abrasive coatings | 2.5 - 5 mm |
| Heavy-duty abrasive coatings | 5 or more |
| Corrosive protection | 1 - 1.5 mm |

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SURFACE PREPARATION

Steel and cast iron require abrasive grit blast to a "Near-White Metal" (SSPC-SP10) or Class 2½ blast for most non-immersion applications and prime with AD-1147 (metal primer). For use in immersion conditions, prime with AD-6 or 415.

No primer is required over automotive paint provided it is lightly abraded (sanded) to assist bonding.

Please consult **Poly-Tech** for specific details on recommended primers for other surfaces.

EQUIPMENT

Use only 1:1 mix ratio (by volume) in heated plural component spray equipment. Both low and high-pressure equipment can be used.

CURE AND RECOAT DETAILS

Curing rate of this product is dependant on the ambient and surface temperatures. As the temperatures increase, the curing rate decreases.

| | 10 - 15 °C | 20 - 30 °C | 30 - 40 °C |
|-----------------------------------|------------|------------|------------|
| Hard coating (minutes) | 20 | 10 | 6 |
| Full cure (days) | 7 | 6 | 5 |
| Recoat – minimum (minutes) | < 8 | < 4 | < 2 |
| Recoat – maximum (hours) | 5 | 3 | 2 |

TYPICAL PHYSICAL PROPERTIES

| | |
|--------------------------------------|---------------------|
| Hardness (Shore A) | 80 ± 5 |
| Tensile Strength (MPa) | 7 |
| Elongation (%) +/- | 260 |
| Angle Tear Strength (kN/m) | 25 |
| Trouser Tear Strength (kN/m) | 8.7 |
| Din Abrasion (mm³) | 170 |
| Specific Gravity | 0.9 |
| Colour | White / Pale yellow |

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