

Approvals and conformities

MIL-SPECS MIL-PRF-85285 Rev F Type I / II / IV Class H Form M Grade N (Type IV Gloss only)

PT-799 Polyurethane is a high-performance, two-component, polyurethane topcoat designed for exterior use, general aviation, business jet, and commercial aircraft. This coating is also used widely for industrial, oil and gas as well as by original equipment manufacturers.

Benefits:

- Excellent chemical resistance to hydraulic jet fluid, fuel, and crude oil
- Extreme durability and impact resistance
- UV-resistant and high color/gloss retention

Available in liquid

Can be provided in designated AMS-STD-595A colors upon request.

USES

Please, consult us regarding **SOCOMORE** solutions for:

- Surface preparation (SOCOCLEAN, DIESTONE & DS ranges),
- Functionalized coatings (SOCOGLAZE, AEROGLAZE, CHEMGLAZE, PRIAM, LBYH ranges),
- Surface treatment (SOCOCLEAN & SOCOSURF ranges),
- Adhesion promotion (SOCOGEL & PREKOTE ranges)
- Chemical stripping (SOCOSTRIP & SPC ranges)

DIRECTIONS FOR USE

Preparation

Two Component Product

- Shake components A and B on a paint shaker for 5 – 10 minutes for optimal results.
- Admix by volume:

1 Part	Component A (Base)
1 Part	Component B (Catalyst)

- Add the Catalyst to the Base.
- Admixed material should be allowed a 15-minute induction time for best application results.
- Reduce: Use reducer **SOCOGLAZE PT-1003 TYI**, 10% by volume. MEK can be used in

small quantities.

Application

SOCOGLAZE PT-799 should be applied using an HVLP spray system. Conventional Spray Equipment can also be used, but has not been verified. Please consult with a SOCOMORE representative for specific equipment recommendations and settings.

1. Make sure pots, guns, and lines are purged and cleaned.
2. Mix both base and catalyst thoroughly and filter/strain before spray application. *NOTE: It is not recommended to strain flat/matte coatings.*
3. Always air-blow and tack-wipe the surfaces to be painted. Aircraft should be grounded to prevent static.
4. Best application results: apply 3 coats: 1 fog/tack coat & 2 full coats from 0.6 – 1 mil thickness.
5. Do not allow more than 48 hours to pass before applying the second coat.
6. Recommended Dry Film Thickness is 1.7 - 2.3 mils. Some colors may require thicker films to achieve hiding.
7. For wet sanding or buffing of coating, wait a minimum of 13 hours but not more than 26 hours. *NOTE: If the paint is allowed to cure for more than 48 hours wet sanding and buffing are not possible.*
8. This coating will dry to an extremely hard but flexible finish. However, it can be wet sanded and buffed. For the best results wait a minimum of 13 hours but no more than 26 hours before wet sanding and buffing. It is recommended that you use 600-grit wet sandpaper. If the paint cures for more than 48 hours wet sanding and buffing are not possible. Do not allow the coating to dry for more than 30 hours if you need to wet sand.

Drying & Curing Schedule

Dry times are based on the dry film thickness between 1-2 mils (25-50 microns).

Air Dry Times:(75 F / 25 C and 50% Relative Humidity)

Set to Touch: 6 hours

Dry Hard: 12-15 hours

Recoat Time: 1 hour or tack dry. You can recoat without sanding up to 72 hours after application.

Force Dry Times: 15 minutes air dry before placing the painted part in the oven. The full chemical cure requires 2 hours at 225 F/107 C after the coating has dried hard. *NOTE: Accelerating dry time does not REDUCE THE time it takes to achieve a full chemical cure. The full chemical cure requires a minimum of 7 days.*

Equipment Cleanup

Use **SOCOGLAZE PT-1003 TYI Reducer/Thinner**. Do not allow the material to dry or cure inside any equipment.

TECHNICAL CHARACTERISTICS

Coating Properties & Characteristics

Characteristic	Value
Mix Ratio, by volume	1-part Base to 1-part Catalyst
Reducer	SOCOGLAZE PT-1003 Type I
Recommended Dry Film Thickness	1 mil
Hardness	Pencil Hardness – 5H
Flexibility	¼ “ - Mandrel – Passes
Salt Spray	1000 + Hours
Admixed Viscosity	15 seconds, max #4 Ford
Admixed Weight per Gallon	10.2 lbs.
Admixed Solids By Weight	65%
Theoretical Coverage	600- 800 sq. ft./gal.
Pot Life	4 hours
Coatings VOC	340 g/L

Weather & Chemical Resistance Properties	
Characteristic	Value
Salt Spray per ASTM B117 (corrosion)	1000+ hours
Humidity (Filiform)	1000+ hours
Lubricating Oil Conforms to MIL-L-23699	24 hrs. at 250°F
Hydraulic Fluid Conforms to MIL-H-5606/MIL-H-83282	24 hrs. at 150°F
JP-5 Jet Fuel Conforms to MIL-T-5625	7 Days at Room Temperature
Skydrol 500B Conforms to MIL-C-83286B	7 Days at Room Temperature
Methyl Ethyl Ketone soaked cloth 100+ rubs	Passes
DS2 [1,5-Dichloropentane]	Passes
The Chemicals listed below were tested at:	1 drop per day for five (5) days:
Phosphoric Acid [10%]	Passes
Isopropanol [99%]	Passes
Acetone	Passes
Ethanol [99%]	Passes
Triton X-100	Passes

PRECAUTIONS FOR USE AND STORAGE

Storage

Shelf life is only applicable for materials stored in unopened and undamaged original factory-filled containers. Can be stored for 12 months when stored between 50 -95 F.(10 -35 C) For more information regarding the danger of the product, please consult the product safety data sheet according to local regulations. For professional use only.

This technical data sheet replaces and cancels the previous one.

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