

PRODUCT INFORMATION DATA SHEET

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03W127A (03-W-127A) MIL-PRF-85285E TY I CL H FED STD 595 COLOR 17925 POLYURETHANE TOPCOAT

Product Information				Forced Dry Schedule																								
Specification: MIL-PRF-85285E TYPE I CLASS H Description: Chemically cured, two-component, polyurethane topcoat intended for use on exterior application on aircraft and aerospace equipment. Feature: - When used over properly applied Commercial or Military primers, it provides excellent protection against weathering, humidity and salt spray. - Resistant to hydraulic fluids, lubricating oils, JP-5 fuel and water Color: Fed Std 595C # 17925 Gloss White Reducer/Thinner: None required. Mix Ratio 1:1 by parts by volume 1 parts 03W127A base component to 1 part 03W127ACAT catalyst component <table><tr><th>Kit size</th><th>03W127A base</th><th>03W127ACAT</th></tr><tr><td>GK</td><td>1 can filled @ 128 oz / 3.8L</td><td>1 can filled @ 128 oz / 3.8L</td></tr><tr><td>QK</td><td>1 can filled @ 32 oz / 946 mL</td><td>1 can filled @ 32 oz / 946 mL</td></tr><tr><td>1-PK</td><td>1 can filled @ 8 oz / 237 mL</td><td>1 can filled @ 8 oz / 237 mL</td></tr></table> Pot Life: 4 hours at 70° ± 10°F, 50 ± 10% R.H. Viscosity: initial: 30 seconds max # 4 Ford Cup 4 hours: 60 seconds max # 4 Ford Cup Induction Time: none required Application Thickness: 1.7 – 2.3 mils dry film thickness Storage stability: 1 year when stored indoors between 35 – 115°F in original unopened containers.				Kit size	03W127A base	03W127ACAT	GK	1 can filled @ 128 oz / 3.8L	1 can filled @ 128 oz / 3.8L	QK	1 can filled @ 32 oz / 946 mL	1 can filled @ 32 oz / 946 mL	1-PK	1 can filled @ 8 oz / 237 mL	1 can filled @ 8 oz / 237 mL	For dry to stack conditions only. Allow a minimum of 30 minutes flash off time at ambient temperatures* prior to exposing painted parts to high temperatures. Complete testing should be done prior to use. Below are suggested starting points. Other variables may affect these cure schedules. <table><tr><th>Temperature</th><th>Time</th></tr><tr><td>120°F</td><td>45 minutes</td></tr><tr><td>140°F</td><td>30 minutes</td></tr><tr><td>160°F</td><td>20 minutes</td></tr><tr><td>180°F</td><td>15 minutes</td></tr></table> *Ambient temperatures are defined as 70° ± 10°F and 50% ± 10% Relative Humidity.			Temperature	Time	120°F	45 minutes	140°F	30 minutes	160°F	20 minutes	180°F	15 minutes
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Mixing and Thinning																												
				Thoroughly stir or shake the base component (Part A) before combining to ensure all solids are completely dispersed. Add one part by volume of catalyst component (Part B) to one part by volume of base component (Part A). Do not use the catalyst component (Part B) from another color. Mix by hand stirring, paint shaker or mechanical mixing to ensure the base/catalyst mixture is homogeneous. DO NOT SHAKE OR MECHANICALLY MIX MATERIAL FOR LONGER THAN 10 MINUTES. Thinners are not required for the mixed material. Available thinners for polyurethanes are MIL-T-81772B Type I* (IS-213), VOC Exempt Reducer (IS-256) and LOW HAPS thinner (IS-260). Do not add thinners to attempt to compensate for coatings beyond its useful pot life. *Use only if needed and if local and state VOC limits allow.																								
Application & Equipment																												
				Coating may be applied over properly cleaned composite surfaces, epoxy primer coatings or polyurethane coatings. Apply the topcoat using two coats to a total dry film thickness of 1.7 – 2.3 mils. Apply the first coat as a light (mist) coat. Allow the coat to set for 30 – 60 minutes (depending on airflow, temperature and humidity) before applying the second coat to permit solvent evaporation. Apply the second coat in a full wet coat to achieve the desired film thickness. Conventional, Air, Air Assisted Airless, HVLP, Electrostatic spray equipment may be used to apply this material. For your application, please contact the equipment manufacturer for more specific information on Conventional, HVLP or Electrostatic spray applications, and recommendations on hose diameter and lengths.																								
Packaging, Yields, Shipping Weight																												
				This material is available in the follow kit sizes: <table><tr><th>Kit size</th><th>Approx. Yield (Mixed)</th><th>Approx. Shipping Weight</th></tr><tr><td>GK</td><td>2 gallons</td><td>23.7 lbs (10.8 kg)</td></tr><tr><td>QK</td><td>2 quarts</td><td>5.9 lbs (2.7 kg)</td></tr><tr><td>1-PK</td><td>1 pint</td><td>1.5 lbs (0.67 kg)</td></tr></table>			Kit size	Approx. Yield (Mixed)	Approx. Shipping Weight	GK	2 gallons	23.7 lbs (10.8 kg)	QK	2 quarts	5.9 lbs (2.7 kg)	1-PK	1 pint	1.5 lbs (0.67 kg)										
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Equipment Cleanup																												
				IS-213 Polyurethane Reducer (MIL-T-81772B Type I) may be used for general clean up of parts and equipment before coating has fully cured and is still in a liquid state. Once material is fully cured, use an approved chemical paint removal system to strip off coating.																								
Safety																												
				Refer to the product label or Material Safety Data Sheet (MSDS) for each component for Personal Protective Equipment and Proper Handling.																								

Characteristics*			
Characteristics	Base	Catalyst	Admixed
Weight per gallon (lbs)	12.9	7.9	10.4
% Solids by weight	82.2	42.0	66.9
% Solids by volume	69.0	34.2	51.6
Coatings VOC (g/L)	274	550	412
Coatings VOC (lbs/gal)	2.3	4.6	3.4
Material VOC (g/L)	274	550	412
Material VOC (lbs/gal)	2.3	4.6	3.4

Dry Film Density:** 1.62 g/cc

Theoretical Coverage per gallon: 827 sq. ft.

Theoretical Coverage per GK as applied: 1654 sq. ft.

Theoretical Dry Film Weight (per gallon kit as applied): 3.83 g/sq ft (0.0084 lbs/sq. ft.)

* Characteristics are calculated based on product formulas and ingredient characteristics as reported to Deft, Incorporated by raw material suppliers. Values reported are not specification values. They are presented for general information only.

** Dry film density, theoretical coverage and dry film weight is based on proper application of coating at 1 mil dry film thickness and 100% transfer efficiency.

Dry Times	
Set to Touch: 6 hours, min	Dry Hard: 12 hours, max
Dry to Tape: 12 hours, min	Full Cure: 14 days

Note: Dry times above were established at room (ambient) temperatures, 70° ± 10°F and 50% ± 10% Relative Humidity.