AXONHENTZEN Aerospace
307 Echelon Road, Greenville, SC 29605 USA
Tel. 864-299-2819 Fax 864-299-2820

TECHNICAL DATA

BC-1 SERIES / PG-33-C1
EXTERIOR DECORATIVE POLYURETHANE BASECOAT/CLEARCOAT

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PRODUCT DESCRIPTION

This high solids polyurethane basecoat/clearcoat system is designed for use as the exterior decorative coating system for aircraft. The system's fast-cure basecoat allows for rapid process flow and its one-coat hide capabilities allow for significant weight savings when compared to traditional finishes. When fully cured this system exhibits excellent Skydrol and mar resistance and meets the most demanding aerospace specifications for chemical resistance, hardness, flexibility, buffability, and color/gloss retention. This system also exhibits superior DOI (distinctness of image).

PRODUCT CODES

BC-1 SERIES BASECOAT / PH-66 HARDENER
PG-33-C1 CLEARCOAT / PH-34 HARDENER

MIXING / APPLICATION

BASECOAT (BC-1 SERIES)

Shake or stir base component well. To 1 part BC-1 SERIES base slowly add 1 part PH-66 hardener by volume. Agitate to insure complete mixing. A 10-15% reduction of the admixed material with SR-350 (VOC compliant blend) is recommended for proper application, film thickness control, and a smooth film appearance. Allow admixed material to stand for 15 minutes prior to application. Apply one to two wet coats to a dry film thickness of 1.0 - 2.0 mils for optimum performance. Pot life is 4 hours*. Basecoat will dry to touch in 0.5 - 1 hour and dry to tape in 2 hours at 77 ºF. Allow the basecoat to dry for no less than 2 hours and no longer than 48 hours before applying the clearcoat. Reactivation or the use of an adhesion promoter will be necessary if the basecoat is cured for longer than 48 hours.

CLEARCOAT (PG-33-C1)

To 1 part PG-33-C1 base slowly add 1 part PH-34 hardener by volume. Agitate to insure complete mixing. A 5-10% reduction of the admixed material with SR-350 (VOC compliant blend) is recommended for proper application, film thickness control, and a smooth film appearance. Allow admixed material to stand for 15 minutes prior to application. Apply two wet coats to a dry film thickness of 2.0 - 3.0 mils for optimum performance. Pot life is 4 hours. Clearcoat will dry to touch in 4 – 6 hours and dry to tape in 10 – 12 hours at 77 ºF. This system can be baked at temperatures below 175 ºF after a 30-minute ambient flash time. At 120 ºF, the dry to tape time is 4 hours. Full properties are achieved after a 7-day cure at 77 ºF or a 24-hour bake above 120 ºF.

For best results use the product within 2 hours of mixing.

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PHYSICAL PROPERTIES

Appearance:	A) Base	Semi-Gloss/Various Colors
	B) Clear	High Gloss Clear
Gloss:	A) Base	10-60 @ 60 degrees
	B) Clear	>90 @ 60 degrees
Admixed Viscosity:	A) Base	16-18 sec Zahn #2
	B) Clear	16-18 sec Zahn #2
Weight per Gallon:	A) Admixed Base	9.1–10.2 lbs/gal
	B) Admixed Clear	8.4 lbs/gal
Volume Solids:	A) Admixed Base	47.1–51.6%
	B) Admixed Clear	42.3%
Dry to Tape:	A) Base	2 hrs @ 77 ºF, 50% R.H.
	B) Clear	10-12 hrs @ 77 ºF, 50% R.H.
Coverage @ 1 mil (no loss):	A) Base	750-830 ft^2/gal
	B) Clear	675 ft^2/gal
Fineness of Grind:	A) Base	4+ Hegman
	B) Clear	N/A
VOC Admixed:	A) Base	360-390 g/L
	B) Clear	390 g/L
Dry Film Density:	A) Base	6.78 - 7.73 lbs/1000ft^2 @ 1 mil
	B) Clear	5.91 lbs/1000ft^2 @ 1 mil

TABLE 1 (WEIGHT SAVINGS)

TRADITIONAL TOPCOAT (BASE WHITE)

FILM DENSITY	FILM THICKNESS	SURFACE AREA	TOTAL WEIGHT
7.9 lbs/1000ft^2@ 1 mil	3.5 MILS	10,000 FT^2	***275 LBS***

BASECOAT/CLEARCOAT (BASE WHITE)

	FILM DENSITY	FILM THICKNESS	SURFACE AREA	TOTAL WEIGHT
BASECOAT				
	7.7 lbs/1000ft^2@ 1 mil	1.5 MILS	10,000 FT^2	116 LBS
CLEARCOAT				
	5.9 lbs/1000ft^2@ 1 mil	2.0 MILS	10,000 FT^2	118 LBS
				234 LBS

WEIGHT SAVINGS

15.1%

PRECAUTIONS:

Use with adequate ventilation and proper respiratory protection. See MSDS for complete details of composition and precautions.