NAUTICOAT^{XP} ACRYLIC TOPCOAT

INTRODUCTION

Nauticoat^{XP} is a two component coating series that provides a hi-gloss acrylic fortified polyurethane topcoat. It is designed for marine and industrial vessels and vehicles requiring maximum gloss and color retention. It can be made in clear or any chart color including most custom colors. When fully cured, these coatings exhibit excellent resistance to staining, water blistering, fluids and marring. The XP series offers the hardness, flexibility and D.O.I. (distinctness of image) of crosslink polyurethane technology with the reparability of acrylic topcoats.

USES

Nauticoat^{XP} Acrylic Topcoat is used as an ultra hi-gloss finish coat for spray applications (also available in 2K aerosol cans). Though specifically designed to withstand harsh marine environments and aerospace specifications, Nauticoat^{XP} is suitable for almost any application requiring beauty, UV protection, and abrasion/ chemical resistance. For exterior and interior use. Do not use below the waterline.

PHYSICAL PROPERTIES

Appearance (Gloss):	hi-gloss, various colors
Gloss:	>95 @ 60º
DOI:	>94 @ 20º
Semi-Gloss:	41-69%
Satin:	26-40%
Flat:	<10-15%
Viscosity (admixed):	17 - 18 Zahn #2
Volume solids (admixed):	48-52%
Pot life:	4 hours @ 75ºF
Coverage @ 1 mil (no loss):	600-800 ft^2/gal
Coverage @ 3 mils (no loss):	200-275 ft^2/gal
VOC (admixed):	<420g/L
Pencil Hardness:	2H
Impact Resistance:	Direct/Reverse >80 in/lb
Shelf Life:	2 Years from DOM

MIXING

COMPONENTS

99-XP-XXXX Nauticoat^{XP} Acrylic Base (various colors)
99-XP-CLEAR Nauticoat^{XP} Ultra Hi-Gloss Clear Base

99-XPA-100 Nauticoat^{XP} Spray Activator
SR-99 Quantum^{99} Medium Spray Reducer
SR-001 Quantum^{99} Cool Weather/Fast Reducer
SR-005 Quantum^{99} Warm Weather/Slow Reducer

ADDITIVES

99-X-105 Quantum Polyurethane Accelerator
99-X-110 Quantum Fisheye Eliminator
99-X-113 Quantum Flattening Paste

MIX RATIO - HI-GLOSS SPRAY

SPRAY	PARTS	EXAMPLE
99-XP-XXXX	1	8 oz.
99-XPA-100	1	8 oz.
SR-XXX	0-0.15	0-2.5 oz.

MIXING

1. Mix base to ensure all solids are properly mixed.
2. Using the chart above, mix base and activator and agitate thoroughly.
3. Reduce with up to 10-15% SR-XX and mix thoroughly
4. Let induct for 5 mins prior to application

APPLICATION

SURFACE PREPARATION

Surfaces to be painted should be cleaned with SR-002 surface prep cleaner and then sanded, using #220 sandpaper, and solvent wiped to remove any residue from the surface. Prime prepared surfaces with Quantum 45-A-100 Surfacing Primer, Quantum 45-AHB-100 High Build Primer(fiberglass) or Quantum 45-IP-4094 corrosion resistant primer (metal) if needed. (Apply primer according to Application guidelines) Then sand and clean thoroughly.

Due to the porosity of aged gel-coat, “die back” of the topcoat may occur if applied directly to a gel-coat surface.

SPRAY APPLICATION

EQUIPMENT[1]

Gun Type	Nozzle	Air Pressure
Conventional Siphon Feed	1.2-1.4 mm	28-32 psi
Conventional Gravity Feed	1.2-1.4 mm	28-32 psi
Conventional Pressure	0.8-1.2 mm at 8-10 oz/min	28-32 psi
HVLP Gravity Feed	1.2-1.4 mm	8-10 psi at cap
HVLP Pressure Feed	0.8-1.2 mm at 8-12 oz/min	8-10 psi at cap

[1]Refer to the manufacturer’s directions for gun specific recommendations.

SPRAYING

Apply 2-3 medium coats allowing 45mins @72ºF between coats until recommended film thickness is achieved.

Warning: topcoats that have been allowed to cure >12 hrs @ 72F must be abraded before subsequent coats are applied. Higher temperatures and urethane accelerators will decrease recoat window.

NOTE: Application of these product systems requires recommended temperature/humidity conditions and film thickness ranges. The material, hangar, and substrate temperature should be no lower than 45ºF before, during, and after application. Do not apply paint materials to surfaces less than 5ºF above dew point, or to surfaces warmer than 125ºF. Substrate temperature should be minimum 45ºF to maximum 125ºF.

DRY TIMES

AIR DRY - SPRAY[2]	
Touch	1 hour
Through	4 hours
Tape	8 hours
Polish	36 hours
Light Service	36 hours
Full Cure	7 days
Overcoat (Self)	30 mins min/12 hours max
Overcoat (Clear)	1 hour min/12 hours max

[2]Air dry and overcoat times are dependent on shop conditions. Use 99-X-105 Urethane Accelerator to accelerate dry times.

[3]If recoating after 12 hours, scuff sand with 220 grit

SANDING / COMPOUNDING / POLISHING

SANDING

- Wet sand with 1000 grit or finer or use a foam interface pad with P1000 DA or finer.
- Darker colors may require an additional 2000-3000 grit wet sand

COMPOUNDING

- Apply a ribbon of rubbing compound to the area that was sanded or contains sand scratches.
- Maintain air polisher or variable speed buffer at 1500-20000 rpm. Remove excess finishing compound with a clean soft cloth prior to applying finishing polish.
- Use a wool pad and an effective rubbing compound.

POLISHING

- Apply a ribbon of polishing material to the area to be polished.
- Maintain a variable speed buffer or an orbital polisher at 1500-2000 rpm.
- Use a wool pad and an effective polishing compound. Keep the polisher/buffer moving at all times. Overlap each pass approximately 50%. As finishing polish begins to dry, stop polishing. Wipe off excess finishing polish with a clean soft cloth.
- Hand buff with a clean soft cloth as a finishing touch.