



## TECHNICAL DATA SHEET



# TOPCOAT COLOR PU 320

LACQUER  
Two component

Edition December 07

Two component « FLEXIBLE » Polyurethane Acrylic lacquer  
**VERY HIGH BRIGHTNESS**  
**VERY HIGH RESISTANCE TO U.V.**  
« Very high physical and chemical performance »

## FEATURES

Two component, new generation of flexible polyurethane topcoat for exterior protection, with very high resistance to UV. For high altitude Aircrafts, and Yachts.

This topcoat is compatible for over coating most PU topcoats, provided the surface preparation has been correctly effectuated.

- Good recoatability, can be applied on sanded Undercoats 215HB and 228HB, and directly on AEROPRIM 523 after one hour without sanding.
- Easy polishing (after 48/72 hours depending on temperature, with special kit 3M).
- Exceptional high gloss and long lasting gloss retention.
- New "wet look" aspect, provided surface preparation has been properly made.
- Outstanding colour retention properties.
- Bright colours will not fade nor discolour.
- Brightness superior to 95 %.
- Excellent application properties.
- Excellent chemical and hydraulic fluid resistance (Skydrol). Excellent anti-abrasion and tough coating (60% Semi-gloss, 40% semi-gloss, or 15% matt possible on special request).
- A less flexible topcoat formulation on special request (SEATOP 320 R) can be supplied.

## RECOMMENDED USES

This system is recommended for high quality finishing :

- protection and decoration above the waterline, decks, spars of Yachts, pleasure boats, race boat and aircraft exteriors.
- finishing of yacht radomes
- finishing of furnitures.
- dashboard exposed to UV (yachting, automobile, aviation)

**Meets Airspace NT 10113 and 10012 and Airbus TNA 10028 requirements.**

**Meets BMS 10-60H requirements.**

**Meets MIL C 83286 requirements.**

**TOPCOAT COLOUR PU 320** can be recoated by varnish TOPCOAT CLEAR 360 UVR, particularly for dark colors, to give depth effect and protect the film during a long time.

**TOPCOAT COLOR PU 320** available in filled version with TEFLON® - TOPCOAT 330 PTFE

**TOPCOAT COLOR PU 320** available in matt version non-reflecting for military applications, depends on the air force color, land force or the Navy. Contact us.

## SPECIFICATION DATA

**COATING TYPE** : flexible polyurethane topcoat

**COLOR** : depends on colours AFNOR, RAL, special colors

**GLOSS** : Very High Brightness. Exists in matt and semi-gloss

**COMPONENT** : Two component

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**COMPONENT RATIO** :

- Volume: 1 Base / 1 Hardener with **SPRAY**
- Volume: 2 Base / 1 Hardener with **BRUSH**

**INDUCTION TIME** (at 23°C) : 10 minutes

**POT LIFE** (at 23°C) : 6 hours

**THINNER** : PU N° 2 Spray – N° 4 Spray summer or brush winter, ACCELERATOR N° 702 - JOINT N° D 212

**DENSITY AT 20°C** : 1,13 +/-0,05%

**VOLUME SOLID** : 37 +/- 2%

**VOC** : 529 to 576 g/l

**THEORETICAL SPREADING RATE** :

9,3 Sq.m/L for 40 dry microns

**CONSUMPTION** : depends on colors and undercoat color

**RECOMMENDED FILM THICKNESS PER COAT:**

Dry : 30 to 40 microns

Wet : 80 to 110 microns

**RECOMMENDED FILM THICKNESS TOTAL :**

Dry : 70 to 100 microns

Wet : 180 to 270 microns (2 or 3 crossed coats wet on wet)

**DRY TIME** (at 23°C - 40 to 60 % HR) :

Dustfree: 1 hour

To handle: 8 hours

To mask : 16 to 18 hours

**DRY TIME TO RECOAT** (at 23°C - 40 to 60 % HR) :

Minimum : 2 hours

Maximum : 72 hours

**Nota** : Information concerns spray version of hardener

**MAXIMUM TEMPERATURE LIMITS:** - 60 to + 120°C

## SURFACE PREPARATION

All surfaces must be free of grease, dust, dry spray, moisture and other foreign matter and be properly primed with a compatible epoxy primer. To insure the best appearance, the primer or undercoat should be smooth and free of any surface defects such as runs, dry spray or heavy orange peel.

To obtain a perfect quality of finishing, **TOPCOAT COLOR PU 320** should be applied on undercoats UNDERCOAT EP 215 HB or PORE FILLER PU 228 HB, previously sanded. PORE FILLER PU 228 HB is used as filler, and allows to obtain a perfect surface, after sanding with very fine grit, without porosity. It's indispensable condition to obtain a perfect finishing. TOPCOAT COLOUR PU 320 can also recoat INTERFACE EPU 221 to ensure a good bonding, a perfect film and allow to check the surface quality before painting.

NOTE : With yellow, red, some green and blue paint we suggest you to apply 1 first coat of TOPCOAT COLOR PU 320 grey

For Yellow : Light grey 12927100B00xL

For Red and Oranges : Medium grey 12927200B00xL.

For some Blue and green : Dark grey 12927300B00xL

## MIXING AND THINNING

Before mixing the components, mix carefully the base portion first to obtain a smooth, homogeneous condition. After mixing the base portion, add the hardener slowly with continued agitation. After adding the hardener, continue to mix slowly.

SPRAY VERSION : After 10 minutes of induction time, it's possible to dilute from 0 to 20 % of PU N°2 or PU N°4 (in summer) depends on application conditions or method. You can use booster thinner N° 702 for application in bad weather (between 5 to 10°C). You can use Joint thinner D 212 for spot finishing, matt aspect or overspray on wet film or for repair on dry film.

BRUSH VERSION : After 5 minutes of induction time, it's possible to dilute 10 to 40 % of PU N° 4 or Brush extra slow in summer depends on application conditions or method

**You must check the viscosity with cup DIN or AFNOR**

**Spray gun application : check the viscosity every 2 hours. Don't forget to mix after every dilution.**

## APPLICATIONS

APPLICATION METHOD		THINNING	TIP SIZES	PRESSURE
BRUSH	YES	10 to 40%		
ROLLER	YES	10 to 40%		
SPRAY GUN	YES	0 to 20%	1,1 to 1,8	2 to 5 BARS
AIRLESS SPRAY	YES	0 to 5%	0,011 to 0,013 mm	100 to 200 BARS
ELECTROSTATIC GUN	YES	10 to 20%	1,2 to 1,8	3,5 to 5 BARS

### CONDITIONS FOR APPLICATION :

Optimum : 20 to 25 °C for 40 to 70 % HR

Limit : 15 to 30°C for 30 to 70 % HR

### FOR TROPICAL VERSION CONTACT US

The substrate temperature must be at least 3°C above the dew point to avoid any condensation - consult the conversion table available at Map Yachting.

**VISCOSITY :** 13s to 14s Cup AFNOR n°4

40s to 45s Cup AFNOR n°2,5

## PRECAUTIONS AND SHELF LIFE

See the material safety data sheet and product label for complete safety and precaution requirements

**PACKAGING :** 1 or 5 Liters for BASE and SPRAY Hardener - 0,5 or 2,5 Liters for BRUSH Hardener

**CLASS ONU :** 1263

**SHELF LIFE :** **Base :** 24 months **Hardener :** 12 months in original unopened cans at + 10 and + 25 °C away from humidity

**Base :** 12 months **Hardener :** 9 months in tropical climate

**FLASH POINT :** Base : between 23°C and 55°C Hardener : <= 21°C

**LABEL :** Base = F : Flammable Hardener = F : Highly Flammable Xn : Harmful



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We guarantee our products against hidden defaults over material and preparation. Our Responsibility is limited at the obligation of freely replacing the defective material without there being a claim for any compensation. The advice we give is based on our experience but they might not be absolutely right. Consequently this does not imply our responsibility in case of inefficiency. Even more our company can not be responsible for any material or corporal damages caused due to a misuse or mishandling of our products. All concession to these clauses, to be valid, must be an official document issued by our offices and signed by our direction.