LBYH 142

2K WATER-BASED POLYURETHANE TOPCOAT

Technical Data Sheet

Approvals and conformities

LEONARDO (formerly ALENIA AERMACCHI / AERONAUTICA)	MDL 5050
SAFRAN NACELLES	HMRC0089

Description :
LBYH 142 is a two-part water-based polyurethane finish that protects parts subjected to extreme environmental attack, chemical attack and high temperatures (240°C).

Benefits :

- Excellent resistance to chemicals.
- Excellent resistance to SKYDROL and aviation fluids.
- Very good UV resistance when completely cured.

USES

Substrate	Preparation
Carbon composite / BMI	Abrasion
Carbon composite / Epoxy	Abrasion

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).
- Non destructive testing products & services (BABBCO range)

DIRECTIONS FOR USE

Two Component Product

socomore www.socomore.com

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Name	Pot-Life (hh:mm)
LBYH 142 PART B	03:00

Preparation & Application
During application, the following requirements must be adhered to:

- 15°C < T° < 35°C
- 30% < Hy < 75%

1 - PNEUMATIC SPRAYING *Viscosity 40s +/- 10 ISO 4*		Volume	Weight	Tol +/-
Base	LBYH 142 NOIR SATINE AM	4	4	
Hardener	LBYH 142 PART B	1	1	0.1
Thinner	DEMINERALIZED WATER	1.1	1	0.2
2 - PNEUMATIC SPRAYING *Viscosity 85s +/- 20 AFNOR 2.5*		**Volume**	**Weight**	**Tol +/-**
Base	LBYH 142 NOIR SATINE AM	100	100	
Hardener	LBYH 142 PART B	25	25	2.5
Thinner	DEMINERALIZED WATER	28	25	5

Table: Application method determines thinner ratio. Viscosity measurements provided are intended to be guidelines only and not parameters for quality control. Verified information is provided in certification documents, which are available from the technical department on request.

IMPORTANT: After curing for one hour at 70°C, the film will not have all properties yet.

Storage
In storage, the product may turn a shade of blue. This has no impact on the final performance of the cured dry product. Stir part A before use to obtain a uniform black colour.

Mixing and viscosity measurement:

- Add the hardener (B) to the base (A).
- Mix vigorously for at least 2 minutes.
- Add 20% (in weight) of thinner to the A+B mixture, and mix for 2 minutes.
- Leave for 30 minutes before checking the viscosity.
- Perform a viscosity measurement: CA 2.5 or ISO 4
- If the viscosity conforms (30-50s for ISO 4 or 65-105s for CA 2.5), the product can be applied.
- If the viscosity does not conform, adjust the viscosity with an extra 10% thinner (max), without additional cure time.
- If the viscosity now conforms (30-50s for ISO 4 or 65-105s for CA 2.5), the product can be applied.
- Do not dilute more than 30%.

AIR DRYING	
Characteristic	**Value**
Dust dry	04:00 hours
Touch dry	10:00 hours
Hard dry	24:00 hours
Overcoating	10:00 hours

FORCED DRYING

Characteristic	Value
Flash off	00:15 hour
Force dry	01:00 hour
Temperature	70°C

TECHNICAL CHARACTERISTICS

Technical Data - Product Ready For Use	
Characteristic	**Value**
Weight solids	46% +/-2
Volume solids	38% +/-2
Recommended wet film thickness	65µ +/-15
Recommended dry film thickness	25µ +/-5
Theoretical coverage	70 g/m2 for 25µ
Shade	Black
Appearance	Satin-matt

Data for mixture n°1

Other Data		
Characteristic	**Value**	**Note**
Heat resistance	190°C	20 Hours
Heat resistance	240°C	6 Hours
Deionised water resistance	14 days	At 20°C
Adhesion	Class 0	On carbon / epoxy composite
SKYDROL resistance	10 days	Immersion at 70°C

PRECAUTIONS FOR USE AND STORAGE

Storage
Can be stored for 12 months between 5°C and 35°C in original, unopened containers. DO NOT ALLOW TO FREEZE.

Shelf life after opening:
- Base : 3 months
- Hardener : 1 month

For more information regarding the danger of the product, please consult the product safety data sheet according to local regulation.

For professional use only.

This technical data sheet replaces and cancels the previous one.