

resoltech 4080 AL BLANC

Hardener 4085 AL BLANC

Food grade epoxy coating



- Complies with food contact european standards (NF 10/2011/EC)
- Excellent chemical resistance
- For oils and alcoholic beverages (up to 20°)
- Gloss finish
- Application by brush, roller or airless

INTRODUCTION

RESOLCOAT 4080 AL BLANC is an epoxy coating specifically formulated for food contact applications, it complies with the **European standard NF 10/2011/EC**.

It is an anti-corrosion and 100% dry extract epoxy coating formulated to provide maximum resistance to chemical agents. It is designed to be used as a protective liner for **tanks and machinery in contact with food products**.

The system has a long hardening time in film enabling large applications, it provides a **smooth and non-porous high gloss finish** to facilitate servicing of the machinery.

The 4080 AL BLANC is **indicated for oils and alcoholic beverages**, it is not recommended for acid solutions.

Solvent less, **it will not transmit any flavour or odour to the food** that will be in contact with the coating.

It can be applied by **brush roller or airless** while guaranteeing low toxicity working conditions to the users. In vertical application, 4080 AL BLANC can be applied **thickness up to 1mm without any risk of sagging**.

On porous surfaces it is recommended to prime the surface with a coat of 80 gr/m² of 1010 resin with 1014 hardener.

MIXING RATIO

The mixing ratio must be accurately followed. It is not possible to change the ratio, it would result in lower mechanical properties.
The mixture should be thoroughly stirred to ensure full homogeneity.

System	4080 AL BLANC / 4085 AL BLANC
Mixing ratio by weight	100 /34

APPLICATION

- The 4080 AL BLANC can be applied by brush, roller, or airless.
- It is recommended to have workshop temperature conditions between 18-25°C in order to facilitate the mixing and application.
- On the contrary, a higher temperature will reduce the viscosity and the pot life of the mix.

PHYSICAL CHARACTERISTICS

1 Visual aspect

4080 AL BLANC :
Filled white liquid

4085 AL BLANC :
Filled white liquid

Mix :
Filled white liquid

2 Density

References	4080 AL BLANC	4085 AL BLANC
Density at 23°C	1.15	0.99
Mixed density at 23°C	1.10	

ISO 1675, ± 0.05 tolerance

3 Viscosity

References	4080 AL BLANC	4085 AL BLANC
Viscosity at 23°C (mPa.s)	3336	1314
Mixed viscosity at 23°C (mPa.s)	3416	

Rheometer, 20 s⁻¹, 2 min, ± 15% tolerance

REACTIVITIES

System	4080 AL BLANC / 4085 AL BLANC
Gel time on 70 mL at 23 °C* (4cm high)	1h24min
Time at exothermic peak on 70 mL at 23 °C	1h30min
Temperature at exothermic peak on 70 mL at 23 °C	131°C
Gel time on 2mm thick film at 23°C	3h40min
Tack time on 3 mm film	4h
Vertical sag resistance at 23°C	>1 mm

Reactivity measurements realized on Rheotech®

CURING AND POST-CURING

In order to obtain the maximum thermo-mechanical properties, it is necessary to respect the recommended curing cycle. The table below shows the glass transition temperatures (DMA) according to different curing cycles.

System		4080 AL BLANC / 4085 AL BLANC
14 days at 23°C	T _g	53°C
	Shore D Hardness	87
16h at 60°C	T _g	78°C
	Shore D Hardness	89
T _{g (DSC)} max		89°C

T_g measured on Kinetech*

T_g max measured on DSC, 10°C/min, inflexion point

Hardness : ISO 868

CHEMICAL RESISTANCES

Systems	Value (mg/dm ²)	Limit (mg/dm ²)
Migration in ethanol 20%	1.8	10
Migration in olive oil	<0.1	10

PACKAGING

- Metal box kit of 1kg + 0.34kg
- Metal bucket kit of 5kg + 1.7kg
- Metal bucket kit of 25kg + 8.5kg

TRANSPORT & STORAGE

Keep containers sealed and away from heat and cold preferably between 10°C and 30°C in a well ventilated area. Our products are guaranteed in their original packaging (check expiry date on the label).

HEALTH & SAFETY

Skin contact must be avoided by wearing protective nitrile gloves & overalls or other protective clothing. Eye protection should be worn to avoid risk of resin, hardener, solvent or dust entering the eyes. If this occurs flush the eye with water for 15 minutes, holding the eyelid open, and seek medical attention.

Ensure adequate ventilation in work areas. Respiratory protection should be worn with ABEKP coded filters.

Resoltech issues full Material Safety Data Sheet for all hazardous products. Please ensure that you have the correct MSDS to hand for the materials you are using before commencing work.

! The data provided in this document is the result of tests and is believed to be accurate. We do not accept any responsibility over the mishandling of these products and our liability is limited strictly to the value of the products we manufacture and supply.



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