

# resoltech 2010 FR Hardener 2014 FR Epoxy auto extinguishing topcoat



- Complies with IMO Solas Part 5 Annex 1
  For bulkheads, walls & ceilings linings, floor covering, and primary deck covering
- Application by brush or roller
- Non-sagging on vertical surfaces
- Gelcoat, topcoat or casting applications

RESOLTECH 2010 FR/2014 FR is a fire retardent epoxy system that **complies with EN 45545-2 standard**, it can be used as a gelcoat, a topcoat or as a casting resin.

One coat of 300 to 500  $\mu$ m applied by brush or roller is recomended in order to obtain the self-extinguishing properties.

After a proper surface preparation, RESOLTECH 2010 FR/2014 FR system may be applied on on **many susbtrates** (steel, aluminium or composite...).

#### 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	2010 FR- 2014 FR	
Mixing ratio by weight	100/11	

#### APPLICATION

- It is recommended to use the products at temperatures above 10°C in order to facilitate the mixing of the two parts.

- Application by brush or roller or casting
- Coverage recommended : 300 to 500µm
- Consumption : 450 to 750 g/m<sup>2</sup>

### PHYSICAL CHARACTERISTICS

#### Visual aspect

**2010 FR :** White paste

2014 FR : Clear liquid MIX : White filled liquid

#### 2 Density

References	2010 FR	2014 FR
Density at 23°C	1.58	0.99
Mix density à 23°C	1	1.52

ISO 1675, ± 0.05 tolerance

#### 3 Viscosity

References	2010 FR	2014 FR
Viscosity at 23°C (mPa.s)	81 500	70
Mixed viscosity at 23°C (mPa.s)	-	28 480

Measured on rheometer, 20s-1, 2 min, gap 1mm

# REACTIVITIES

System	2010 FR/2014
Gel time on 70mL at 23°C (4cm high mix)	2h42
Time at exothermic peak on 70 mL at 23°C	NA
Temperature at exothermic peak on 70mL at 23°C	NA

Reactivity measurements realized on Trombotech® NA : not applicable

## **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 (DSC) according to different curing cycles.

Curing cycle		2010 FR/2014	
16h à 60°C	Т <sub>б</sub>	69°C	
	Shore D Hardness	89	

 $\rm T_{\odot}$  : DSC measurements, 10°C/min, inflexion point Hardness : ISO 868

#### PACKAGING

#### 2010 FR + 2014 FR :

- Box of 1Kg + 0.11Kg
- Bucket of 5Kg + 0.55Kg
- Bucket of 25Kg + 2.75Kg
- Drums kit of 200Kg + 22Kg

#### **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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