

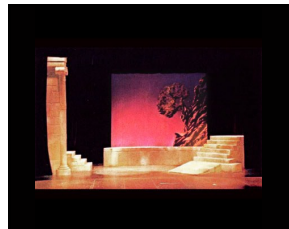
Resin 2010 FGCS

Hardener 2014 FGCT

Technical Datasheet - 30/07/2012

Self extinguishing epoxy gelcoat — conforming to marine, aerospace & civil engineering regulations.

- Self-extinguishing epoxy that complies with marine, aerospace & building industry standards.
- High quality finish
- Very high UV resistance



RESOLTECH 2010 FGCS - 2014 FGCT is a **self-extinguishing** epoxy gelcoat that complies with the **OMI-SOLAS 2000** directive.

Thanks to its application characteristics, it is suitable for the application of both simple and complex forms. The proportions of the 2014 FGCT hardener system are 19.5 parts for each 100 parts of resin weight. Usable working time is 45 minutes and it gives a glass transition temperature of up to 75°C. Once hardened, the parts can be **released from the mould without post-curing**. The optimal thermomechanical properties are obtained after an adapted cycle of curing. However, **postcuring is NOT essential** depending on the final use of the parts.

The gelcoat 2010 FGCS is available in white as standard or in neutral with all RAL color with pigments.

Resin 2010 FGCS

Hardener 2014 FGCT

Self-Extinguishing Epoxy Gelcoat

MIXING RATIO BY WEIGHT

Resin 2010 FGCS Blanc **100**
Hardener 2014 FGCT **19,5**



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.

APPLICATION

It is recommended that these products are used at a temperature of close to 25°C in order to facilitate the mixing process. Lower temperatures increase the viscosity of the mixture. The standard procedure of working with epoxy gelcoats applies this system. The 7080 HC system can be applied by brush, roller, or airless gelcoater.

2010 FGCS has been formulated for application from 500 to 900 µm without sag on vertical surfaces in one only coat.

Coverage: 0,6 kg/sqm for a 500 µm thickness dry film to 1,1 kg/sqm to obtain a 900 µm film.

PHYSICAL CHARACTERISTICS @ 25°C

Visual Aspect

2010 FGCS : Light coloured gel
2014 FGCT : Colourless clear liquid with yellow tints
Mix : White gel

Density

REFERENCES	2010 FGCS	2014 FGCT	Mélange
Density	1.50	0.98	1.45

Viscosity

Viscosity is measured using Brookfield

REFERENCES	2010 FGCS	2014 FGCT	Mélange
Viscosity (mPa.s)	~28500	~65	~3000

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REACTIVITY @ 25°C

Reactivity times and TG are measured using Trombotech®

Reference	2010 FGCS - 2014 FGCT
Pot life on 70mL	45 min

CURING & POST-CURING

While a post-cure is not mandatory, In order to obtain a material with maximum mechanical properties and a **TG of 75°C**, it is necessary to post-cure with a cycle of : **24h at 20°C + 15h at 60°C**

MECHANICAL CHARACTERISTICS

Flexion

% Elongation to break: 10 %

Hardness

Shore A DIN 53505/ISO 868/ASTM D 2240 99 shore A

FIRE & SMOKE CHARACTERISTICS

HOMOLOGATIONS

MARINE

- Complies with resolutions **MSC.61 (67)**, **OMI A.653 (16)**, also complies with directive **II-2/3.8**, **II-2/34** et **II/49** of the **SOLAS 2000** convention

AEROSPACE

- Self-extinguishability complies with **UL94 : V0**
- Self-extinguishing according to **FAR 25.853 horizontal**
- Self-extinguishing according to **FAR 25.853 vertical**
- Fire/smoke complies with the **AIRBUS ABD0031 directive**

CONSTRUCTION / CIVIL ENGINEERING

- Conforms to class **M2** requirements

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PACKAGING

- Kit : 1kg + 0.195kg
- Kit : 5kg + 0.975kg
- Kit : 25kg + 4.875kg

TRANSPORT & STORAGE

Shelf life is one year in sealed containers as provided. Keep containers sealed and away from heat and cold preferably between 10°C and 30°C in a well ventilated area.

HEALTH & SAFETY

It is advised to follow basic rules such as avoiding skin contact, wear masks. Please read our standard health and safety sheet for more information. In case of eye contamination, wash with water and seek medical advice..

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