

RESOLTECH 8010 W

Hardener 8014 W

Water based sprayable epoxy filler

- Models/patterns making
- Direct moulds
- Room temperature curing
- Very easy to sand



RESOLTECH 8010 W / 8014 W system results of the latest advances in epoxy chemistry formulation and eliminates all solvents used normally with sprayable primers and fillers, replacing them with water, thus improving the H&S conditions for workers.

8010 W enables to produce models or direct moulds on any type of support previously milled by CNC or by hand.

The 8010 W maybe sprayed with (3,5 mm nozzle) gravity spray guns, applied by brush or with a flat spatula. The fast drying characteristics and ease of sanding make it possible to apply various layers per day.

It is best to apply the water based epoxy paint **RESOLTECH 4030W / 4034W** as topcoat to close the surface and enable to laminate on the 8010 W. Other lacquers may also be used.

It is recommended to apply coats of up to 1mm max in order to avoid surface defects. Sanding with 120/240/400 grits is very easy.

The 8010 W may be applied on low density EPS and all foams in general. If walking on the model/plug is necessary due to the size of the part, a lamination of 2 layers of glass fibre may be deemed as necessary in order to support the weight of the workers, depending on foam density.

Resin 8010 W

Hardener 8014 W

MIXING RATIO

System	8010 W / 8014 W
Mixing ratio by weight	100 / 12

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 mechanically stirred during no less than 5 minutes to ensure full homogeneity.

Dilution with water is possible once the resin + hardener have been mixed. Recommended dilution will depend on the spray gun nozzle used. 5% to 15% are common.

APPLICATION

The standard procedure of working with epoxy systems applies to 8010 W / 8014 W epoxy filler. Mixing the resin and hardener should be done at a temperature close to 18-25°C. A lower temperature will increase the mixed viscosity as well as its potlife. On the contrary a higher temperature will decrease the mixed viscosity and the pot life will be reduced.

It is recommended to conduct a preliminary test before validation at industrial level.

PHYSICAL PROPERTIES

Visual aspect

- 8010 W : Light grey paste
- 8014 W : Yellow liquid
- Mix : : Light grey liquid

Densities according to ISO 1675 (± 0.05)

References	8010 W	8014 W
Density	0.70	1.05
Mixed density	0.74	

Viscosities according to ISO 2555 ($\pm 15\%$)

System	8010 W / 8014 W		
Dilution with water	0%	5%	15%
Mixed viscosity (mPa.s)	100 000	9000	1300

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REACTIVITY

System	8010 W / 8014 W
Potlife at 23°C on 70mL (~4cm thickness)	30min
Touch dry at 23°C	2h
Hard & sandable at 23°C	20h

Time may vary depending on dilution ratio with water.

CURING & POST-CURING

RESOLTECH 8010 W / 8014 W system cures at room temperature. Like for all water based products, curing time will depend on the local conditions: well ventilated / dry conditions will favour the cure speed.

System	T _G after 14 days at 23°C	T _G after 16h at 60°C
8010 W / 8014 W	45°C	55°C

Measurements made with Kinetech®

MECHANICAL CHARACTERISTICS

Hardness according to ISO 868

System	8010 W / 8014 W
Shore Hardness after 14 days at 23°C	95 Shore A / 46 Shore D
Shore Hardness after 16 hours at 60°C	48 Shore D

Resin 8010 W

Hardener 8014 W

PACKAGING

Available kits of 8010 W / 8014 W :

- 0.56kg : (0.5+0.06)kg
- 3.36kg : (3+0.36)kg
- 11.2kg : (10+1.2)kg
- 16.8kg : (15+1.8)kg

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 stated on the label).

HEALTH & SAFETY

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

Nota : 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.