

resoltech 1010 **ECO**

Hardeners 1014 – 1016

Biobased water based epoxy system



- 32% biobased on resin part*
- Mat or High gloss primer & varnish
- 1/1 Easy mixing ratio in volume with 1014
- Uses water to clean brushes and rollers
- Extreme low viscosity will prime any porous material in depth
- May be applied on humid substrates

*ratio of the number of biobased carbon atoms / the number of total carbon atoms

INTRODUCTION

RESOLCOAT 1010 ECO is a unique water based epoxy system. It may be used in a very large number of applications such as **primer, varnish, veneer adhesive** but also as matrix for **self levelling compounds or mortars**. Domains of application range from marine construction, furniture manufacturing, industrial & residential construction and fine arts.

Apart from hydrophobic substrates, the 1010 ECO system is **compatible with most supports** such as wood, concrete, plaster, stone, ceramic, metal, etc... It can be highly diluted in water so its viscosity drops extremely low, resulting in a prime choice material for priming. It is used as wood primer on new woods & timbers but also **as hardening material** when applied or injected in old woods for conservation or purposes. Less diluted, it becomes a transparent varnish highly resistant to abrasion. It will enhance the colour of woods and other materials such as ceramics or carbon fibre.

Applied in maximum 2 thin layers, it's micro-porosity to vapour will enable the 1010 ECO to be used as a **water barrier** for materials that need to breath (wood, concrete).

RESOLCOAT 1010 ECO is available in 2 finish versions: 1010 ECO/1014 will always be used as first priming coat and as finish coat for **high gloss** results. The 1016 hardener used as finish coat on top of the 1010 ECO/1014 will enable **mat finish aspects**.

RESOLCOAT 1010 ECO **does not contain any solvents**, has no VOC emissions and does not smell when applied unlike any other varnishes. This new generation varnish offers a harmless alternative to all solvented products. Cleaning of tools shall be done with warm water and soap.

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.

Systems	1010 ECO / 1014	1010 ECO / 1016
Mixing ratio by weight	1/1	2/3
Mixing ratio by volume		

APPLICATION

- It is recommended to use the products at temperatures above 17°C in order to ease the water evaporation.
- Lower application temperatures (15°C minimum) are possible if a good ventilation is ensured.
- In case of low temperatures or very damp environments, it is recommended to make a small test before industrial size application in order to check that evaporation of the water is possible.

WARNING : Always mix the resin and the hardener before adding water.

Never use the 1016 hardener in the first coat

PRIMER:

- For priming applications we recommend the following mixing ratio, 1 volume of resin for 1 volume of **hardener 1014**, then dilute with 1 volume of water.
- Application with brush or roller.

VARNISH AND TOPCOATS:

- For **high gloss** applications we recommend the following mixing ratio, 1 volume of resin, 1 volume of **hardener 1014**, then dilute with 1 volume of water.
- For **mat finish** applications we recommend the following mixing ratio, 2 volumes of resin, 3 volumes of **hardener 1016**, then dilute with 2 volumes of water.
- Application with brush or roller.

MORTARS AND SELF-LEVELLING COMPOUNDS:

- Add 10 to 20% of mixed 1010 ECO-1014 to the substrate.
- To fluidize the mix add only a few % of water.
- To smoothen the surfaces, wet the spatula and smoothen before drying.

BIOBASED CARBON CONTENT

References or mix	1010 ECO	1010 ECO 1014	1010 ECO 1016
Biobased carbon mass content	32%	15%	14%

PHYSICAL CHARACTERISTICS

1 Visual aspect

1010 ECO :
Transparent liquid

1014 & 1016 :
Beige liquid

Mix :
Beige liquid

2 Density

References	1010 ECO	1014	1016
Density at 23°C	1.1	1.1	1.1
Mix density à 23°C	/	1.1	1.1

ISO 1675, ± 0.05 tolerance

DRYING AND HARDENING

Systems	1010 ECO/1014 ou 1010 ECO/1016
Pot life at 25°C on 100g	1h50
Drying on film at 25°C on film	2h
Overcoat at 25°C on film	5h
Complete reticulation at 25°C	24h to 48h

Reactivity measurements realized on Rheotech*

PACKAGING

1010 ECO / 1014 or 1010 ECO / 1016 :

- Plastic jerrycan kit of 500g + hardener
- Plastic jerrycans kit of 1, 2, 5, and 16kg + hardener
- Plastic drums kit of 30kg + hardener

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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