

RESOLCOAT 4000 CLEAR

Hardener 4005

Epoxy Clear Coating System

- Clear very high gloss topcoats & varnish
- Room temperature curing
- Improved UV resistance for outdoor use



RESOLCOAT 4000 CLEAR / 4005 is a clear epoxy coating system formulated to produce high gloss coatings with the best possible UV stability for an epoxy system - with all the high mechanical characteristics epoxies offer compared to other coatings.

The system is formulated for the coating of all type of surfaces with high-end finish aspects requirements for inside or outside exposure such as surfboards, art pieces, outdoor furniture...etc...

One only coat should be necessary as the film is thick enough.

Should a second coat be applied, sanding is required between coats unless the second coat is applied within the first coat curing time.

On wood or other porous materials, it is recommended to work in descending temperatures so air does not release while the 4000 CLEAR / 4005 is curing.

To avoid air release & entrapment while curing on porous materials, layer of RESOLCOAT 1010 / 1014 water based epoxy primer may be used.

Resin 4000 CLEAR

Hardener 4005

MIXING RATIO

| System | 4000 CLEAR / 4005 |
|------------------------|-------------------|
| Mixing ratio by weight | 100 / 38 |

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.

It is important to note that epoxy systems tend to heat up much faster in a pot than as a thin film. It is therefore necessary to only mix the necessary amount usable within the given pot life. Keeping the mixture in flat open containers reduces the risks of exothermic reaction.

APPLICATION

The standard procedure of working with epoxy systems applies to this system. The 4000 CLEAR / 4005 can be applied preferably by squeegee or brush. In case of coating a cured surface without peel ply, it is required to deglaze, clean and degrease the support prior to applying the varnish.

It is recommended to have workshop temperature conditions between **18-25°C** in order to facilitate the mixing and the application. A lower temperature will increase the viscosity of the mix as well as its pot life. On the contrary, a higher temperature will reduce the viscosity and the pot life of the mix.

PHYSICAL CHARACTERISTICS @ 23°C

Visual aspect

4000 CLEAR : Clear slightly opalescent liquid

4005 : Clear liquid

Mix : Clear liquid

Densities (ISO 1675, ± 0.05)

| References | 4000 CLEAR | 4005 | 4000 CLEAR / 4005 |
|-----------------|------------|------|-------------------|
| Density at 23°C | 1.18 | 1.00 | 1.13 |

Viscosities (ISO 12058.2, $\pm 15\%$)

| References | 4000 CLEAR | 4005 | 4000 CLEAR / 4005 |
|---------------------------|------------|------|-------------------|
| Viscosity at 23°C (mPa.s) | 3900 | 70 | 630 |

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REACTIVITY

| System | 4000 CLEAR / 4005 |
|--|-------------------|
| Gel time on 70mL at 23°C (~4cm high) | 26min |
| Time at exothermic peak on 70mL at 23°C | 27min |
| Temperature at exothermic peak on 70mL at 23°C | 165°C |
| Gel time on 2mm film at 23°C | 2h30min |

Reactivity measurements realized with Trombotech®

MECHANICAL PROPERTIES

| System | 4000 CLEAR / 4005 |
|------------------------------------|-------------------|
| T _G after 16h at 60°C | 62°C |
| Shore D Hardness after 16h at 60°C | 89 |

T_G measured with Kinetech® (DMA type)

Hardness : ISO 868

PACKAGING

- Plastic jerrycane 1kg + 0.38kg.
- Plastic jerrycane 5kg + 1,9kg.
- Plastic jerrycane 25kg + 9,5kg
- Steel drum 200kg + 3x25,33kg

TRANSPORT & STORAGE

Shelf life is minimum 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

Skin contact must be avoided by wearing protective nitrile gloves & overalls or other protective clothing. Eye protection should be worn. 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.