

LARIT Topcoat 4000 Clear Hardener LARIT 4005

Epoxy Clear Coating System

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



LARIT Topcoat 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 with 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 **LARIT 1010/1014** water based epoxy primer may be used.

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 preferable 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

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 (g/cm ³)	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

REACTIVITY

System	4000 CLEAR / 4005
Gel time on 70 ml at 23°C (4cm)	26 min
Time at exothermic peak on 70 ml at 23°C	27 min
Exothermic peak on 70 ml at 23°C	165°C
Gel time on 2 mm film at 23°C	2 h 30 min

Reactivity measurements realized with Trombotech ®

MECHANICAL PROPERTIES

System	4000 CLEAR / 4005
TG after 16 h at 60°C	62°C
Shore D Hardness after 16 h at 60°C	89

TG measured with Kinotech ® (DMA type)

Hardness: ISO 868

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.

Lange + Ritter 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.

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.

Note: The provided in this document are provided good faith and are based on the test in laboratory and our practical experience and is believed to be accurate. Considering the application of our products gets away from our control, 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.