

## Description

Liquid Crystal is a highly transparent, high performance, high-build, two-pack, solvent-free system applied as a decorative floor finish

## Recommended For

To cover and varnish surfaces for a glazing casting effect. The components of Liquid Crystal have been specifically selected to ensure ease of application with a very good transparency and resistance to UV rays as well as a good mechanical and usage resistance.

## Key Features

- Low viscosity for ease of application
- Good transparency
- Easy application
- Good mechanical and usage resistance.
- Low stickiness and good leveling
- Reduces notably the formation of foam or air bubbles.
- Stability to UV rays and also transparency
- High mechanical features, excellent chemical resistance

## Physical Properties

Solid content	100%	
Spreading rate	1,2 Kg/m <sup>2</sup> /mm	
Density	1.1 g/cm <sup>3</sup>	
Pot-life at 20°C	20 to 25min	
Walkability at 20°C	About 24 hours	
Dry to touch at 20°C	About 16 hours	
Full cure	About 7 days	
Compression resistance N/mm <sup>2</sup>	80	ISO 604
Elongation At Break	7,5 - 8%	ASTM D412
Bending resistance N/mm <sup>2</sup>	56	
Elastic Modulus	1800 Mpa	
Abrasion Resistance	250,41 mg	ASTM D4060

## Surface Preparation

All surfaces must be cured, clean, dry, and free from dirt, dust, rust, stains, grease, oil, mildew, wax, efflorescence, bond-breakers and other contaminants. Remove all loose, peeling, or chalky paint by sanding, scraping, or any other appropriate methods. Repair all cracks, holes, and other surface imperfections with a suitable patching material. Repaired surfaces should then be sanded smooth, dusted clean and primed with a suitable Colortek primer.

New plaster or masonry surfaces must be allowed to cure (28 days) before applying base coat. Cured plaster should be hard, have a slight sheen and a maximum pH of 10. A soft, porous or powdery plaster indicates improper cure. Never sand a plaster surface; knife off any protrusions and prime plaster before and after applying patching compound. Poured or pre-cast concrete with a very smooth surface should be etched or abraded to promote adhesion, after removing all form release agents and curing compounds. Remove any powder or loose particles.

**CAUTION:** Scraping or sanding surfaces of older buildings may release dust containing lead or asbestos. **EXPOSURE TO LEAD OR ASBESTOS CAN BE VERY HAZARDOUS TO YOUR HEALTH.** Always wear appropriate personal protective equipment during surface preparation and finish clean up of any residues by water-washing all surfaces.

## Application Conditions

Do not use in case of humidity; apply on dry surfaces and in room with temperature over 18°C -25°C. Avoid, if possible, to apply in humid days and be aware that in the evening humidity is higher; prefer morning and afternoon hours. (If used near direct sunlight source, cover the glass doors/windows during the application for a minimum of 2-3 days).

## Application Method

Mix carefully component A with component B in ratio 100:50 in weight (ex: A= 1kg + B= 0.5kg); use a mixing drill at medium speed and a rectangular stick in order to pass well along the walls and the bottom of the can (possibly pour off in another can in order to homogenize perfectly the two components).

Slowly pour on the surface and help leveling with a smooth or toothed spatula in order to smooth the resin: the toothed spatula can be useful to determine the wished thickness; for example, to obtain the medium thickness of 1,5 mm., it is advised to use teeth of 5-7 mm., holding the spatula in an inclined way of 30-40° (once applied, the resin with the toothed side of the spatula, pass on the resin with the smooth side in order to secure a perfect leveling). Some applicators prefer the smooth spatula.

When casting Liquid Crystal over decorative floors, it is advisable to work in two times, doing a first thin casting coat and a second thicker cast to have a total consumption of 1,8 – 2,0 Kg/square meter depending on surface smoothness and leveling.

**N.B.: use the resin within 15-20 minutes after mixing the 2 components.**

**IT IS IMPORTANT TO PROTECT LIQUID CRYSTAL FROM DIRECT SUNLIGHT DURING THE FIRST 24 HOURS AFTER ITS APPLICATION.**

## Pack Size

- Drum: 12 kg Base + 6 kg Activator
- Gallon: 2.4 kg Base + 1.2 Kg Activator

## Shelf Life

12 months from the date of production.

## Storage and Handling

Care should be taken to avoid spillage. Product should be stored in a dry area and protected from freezing. Extreme temperatures may cause paint to become unusable. For example: freezing and thawing may cause paint to gel, and high heat may cause solid skin to form.

## Safety

Use under well ventilated conditions. Do not breathe or inhale spray mist or sanding dust. Avoid skin contact; spillage on the skin should immediately be removed with suitable cleanser, soap and water. In case of eye contact, flush immediately with water for at least 15 minutes and seek medical attention immediately. If you experience difficulty breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

## Cleaning

Remove as much leftover product as possible from the application equipment before cleaning. Clean equipment immediately after use with mineral spirits or paint thinner. Do not empty product into drains or watercourses. Wash hands after use in warm soapy water.

## Technical Assistance

Available through your local COLORTEK® Design Center or through your COLORTEK PAINTS® authorized distributor. For the location of the retailer nearest you, email us at [info@colortek.eu](mailto:info@colortek.eu) or check our website [www.colortek.eu](http://www.colortek.eu).

## Disclaimer

Product batches are subject to stringent quality control checks in conformity with ISO 9001:2008, Certificate CH12/1128.

The information submitted in this manual is correct to the best of our knowledge & experience. No liability whatsoever can be accepted on the basis of the information supplied herein.