



CrysticROOF COOLCure Resin

Introduction

CrysticROOF COOLCure is designed for use at lower temperatures, it has been developed to have a quicker curing speed than the standard CrysticROOF resin, CrysticROOF COOLCure can be used with the standard Catalyst M50 or HBO50 'Winter' Catalyst. NB: Care must be taken when using the winter catalyst as it will reduce the working time of the material, the following information should be used as guidance only:

NB: All CrysticROOF resins and topcoats generate heat when the catalyst is added, it is better to mix smaller amounts more often than a large amount in one go, mixing larger volumes potentially will reduce your working time significantly and therefore be wasteful

HBO 50 Catalyst addition with CrysticROOF COOLCure

0-3 ° C – 4%
4-5 ° C – 3%
6-10 ° C – 2%
11-14 ° C – 1%

CrysticROOF Coolcure is a non draining pre-accelerated resin designed for rapid wet out of Scott Baders Chopped Strand Mat on flat and vertical surfaces. CrysticROOF COOLCure exhibits excellent mechanical properties once fully cure (please see the Product Characteristics table for details)

Working Instructions

CrysticROOF COOLCure can be used in the standard manner as CrysticROOF resin and all of the guidance within the installation guide should be followed accordingly, whilst we state that CrysticROOF COOLCure can be used at lower temperature (recommended 5° C) it **cannot** be used when there is frost/ice/snow or moisture on the OSB3 or other substrates, also do not apply late in the day when temperatures are likely to drop rapidly, this is the same for all the CrysticROOF range.

Please ensure that CrysticROOF resins and topcoats are stored at ambient conditions prior to use (18-20 ° C)

Prior to use measure the air temperature and substrate temperature with our Infrared Thermometer,

Product Characteristics

Pot Life

Temperature	Pot Life In Minutes with 2% Catalyst M
15°C	18
20°C	12
25°C	8

Additives

The addition of filler or pigments can adversely affect the hardening of the resin. Users should evaluate the effect of any potential additives before use

Typical Properties

The following tables give the minimum expected properties of CrysticROOF COOLCure Resin when tested in accordance with BS 2782.

Property		Liquid Resin
Appearance		Cloudy, mauvish
Viscosity @ 25°C	poise	3.8
Specific Gravity @ 25°C	poise	1.11
Volatile Content	%	42
Stability in the dark @ 20°C	months	6
Geltime @ 25°C using 2% Catalyst M (or Butanox M50)	minutes	8

* From date of delivery

Property		Fully Cured* Resin (unfilled casting)
Barcol Hardness (Model GYZJ 934-1)		47
Deflection Temperature under load † (1.80 MPa)	°C	78
Water Absorption 24 hours at 23°C	mg	18
Tensile Strength	MPa	68
Tensile Modulus	MPa	3700
Elongation at Break	%	2.5

* Curing Schedule - 24 hrs @ 20°C, 3 hrs @ 80°C

† Curing Schedule - 24 hrs @ 20°C, 5 hrs @ 80°C, 3 hrs @ 120°C

Property		CSM** Laminate
Tensile Strength	MPa	96
Tensile Modulus	MPa	6700
Flexural Strength	MPa	176
Flexural Modulus	MPa	6200
Elongation at Break	%	2

**Made with 4 layers 450g/m² CSM

Curing Schedule - 24 hrs @ 20°C, 16hrs @ 40°C.

Storage

CrysticROOF COOLCure Resin should be stored in the dark in suitable closed containers. It is recommended that the storage temperature should be less than 20 °C where practical, but should not exceed 30 °C. Ideally, containers should be opened only immediately prior to use. Where they have to be stored outside, it is recommended that they are kept in a horizontal position to avoid the possible ingress of water.

Packaging

CrysticROOF COOLCure Resin is supplied in 20kg containers.

Health & Safety

Please see separate Material Safety Data Sheet.