

CrysticROOF

COOLCure RESIN



INTRODUCTION

CrysticROOF COOLCure is designed for use at lower temperatures with the 'Winter' Catalyst HBO 50.

It has been specifically designed for roofing applications. It is not suitable for boat construction, chemical resistance or mouldings in contact with food products.

NB: Care must be taken when using the winter catalyst as it will reduce the working time of the material when used at standard temperatures i.e. 25°C, the following information should be used as guidance only.

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 5-15° 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.

CrysticROOF COOLCure resin should be stirred well by hand, or with a low shear mixer to avoid aeration, and then allowed to stand to regain thixotropy. CrysticROOF COOLCure Resin requires only the addition of catalyst HBO 50, which should be thoroughly incorporated into the resin with a low shear mechanical stirrer where possible.

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.

APPLICATIONS

CrysticROOF COOLCure resin is designed for hand laminating and would normally be used with chopped strand mat.

POT LIFE

Temperature	Cure System	Pot Life in minutes with 1% HBO 50
5°C	4% HBO 50	52.5
10°C	3% HBO 50	35.7
15°C	2% HBO 50	22.8

TYPICAL PROPERTIES - LIQUID RESIN

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

Property	Unit	Typical Values
Appearance		Cloudy, mauvish
Viscosity at 25°C	Poise	3.8
Specific Gravity at 25°C	Poise	1.11
Volatile Content	%	42
Stability in the dark at 20°C	Months	5
Geltime at 15°C using 2% 'Winter' Catalyst HBO 50	Minutes	22.8

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

STORAGE AND SHELF LIFE

CrysticROOF COOLCure Resin should be stored between 5°C and 25°C in the original, unopened container in a dry, well ventilated place. Protect from freezing and direct sunlight. Avoid contact with oxidising agents. If stored outside of these recommendations, shelf life will be significantly reduced.

Stability from date of manufacture when stored in accordance with storage recommendations is 5 months.

PACKAGING

CrysticROOF® COOLCure Resin is supplied in 20kg containers.

HEALTH AND SAFETY

Please see separate Material Safety Data Sheet.

TYPICAL PROPERTIES - FULLY CURED RESIN

Property	Unit	Typical Values*
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

TYPICAL PROPERTIES - CSM LAMINATE

Property	Unit	Typical Values**
Tensile Strength	MPa	96
Tensile Modulus	MPa	6700
Flexural Strength	MPa	176
Flexural Modulus	MPa	6200
Elongation at Break	%	2.0

**Made with 4 layers 450g/m² PB CSM

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



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