

CRYSTIC PD 10154 I

Orthophatlic Neopentyl Glycol polyester resin, with Photo-initiator

Introduction

CRYSTIC PD 10154I is an Orthophatlic neopentyl glycol, Magnesium Oxide thicknable unsaturated polyester resin and with UV Photo-initiator.

Application

CRYSTIC PD 10154I has been specially developed for UV curing systems and relining pipe repair industry.

Features and Benefits

Features

High HDT
High Molecular Weight
High elongation
Long term experience

Benefits

Excellent mechanical properties
Excellent resistance to water ingress
Excellent impact resistance
Safety in use

Formulation

This Resin contains a photo-initiator and can be cured under UV light or LED exposure. For UV curing applications, a UV lamp of 400W Energy is recommended and the optimum wave length absorption is 370 nm.

Approvals

CRYSTIC PD 10154I is type 1140 according to German standard DIN 16946 Teil 2 and group 3 according to DIN 18820 Teil 1.

Additives

Since certain pigments, fillers or extra styrene may affect properties of **CRYSTIC PD 10154I** their effect should be evaluated before addition to the formulation.

Typical properties

On liquid resin

Viscosity @ 25°C Rheomat 37,35s-1	dPas	4 - 6
Specific Gravity		1.10
Acid Index	Mg KOH/g	10 – 15
Solid Content (1H @ 150°C)	%	53 – 57
Stability from date of manufacture when stored in accordance with storage recommendations	Month	9

On fully cured resin

*

Barcol Hardness (GYZJ 934-1)		44
Heat deflection temperature under load (1.8 MPa)	°C	104
Water absorption (24h @23°C)	Mg	15
Specific gravity at @ 20°C		1.16
Elongation at break	%	2,1
Tensile strength	MPa	60
Tensile modulus	MPa	3700
Flexural Strength	MPa	130
Flexural Modulus	MPa	3600

Test according to BS 2782 :1980

1MPa = 1MN/m² = 1N/mm² = 10,2 kgf/cm²

* cured 24 h at 20°C then 3 h à 80°C except for the HDT where the schedule was 24 h at 20°C then 5 h at 80°C then 3h at 100°C.

Packaging

CRYSTIC PD 10154I is supplied in 225 kg or 1100 kg containers. Bulk supplies can be delivered by road tanker.

Storage

CRYSTIC PD 10154I should be stored in the dark, 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.

Health and security

Please refer to the Safety data sheet

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Version

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Group tech class

R50432

