

CRYSTIC GELCOAT 0209 SMK

General Purpose Spray Isophthalic Gelcoat

Introduction

Crystic Gelcoat 0209 SMK is a pre-accelerated, robust, isophthalic and thixotropic polyester gelcoat specially designed for spray application.

Applications

Crystic Gelcoat 0209 SMK has been developed for the production of high quality industrial parts. We recommend stirring the gelcoat with a low shear mixer before use. The gelcoat is pre-accelerated and only requires the addition of the catalyst to start its curing reaction.

Features & Benefits

Features

Pure isophthalic base resin
Robust high reactivity
Levelling additives
Low styrene content

Benefits

Excellent weathering resistance
Rapid curing, fast mould turn round
Excellent self levelling, no wave effect
Better comfort for the workers and for the environment

Variants

This gelcoat is also available with a faster curing time under the reference Crystic Gelcoat 0209 SMKW.

Formulation

Crystic Gelcoat 0209 SMK must be allowed to attain workshop temperature before use. Stir well by hand or with a low shear mixer to avoid aeration, and then allow to stand to regain thixotropy.

The recommended catalyst is Butanox M50 (or other equivalent catalyst) which should be added at 2% in the gelcoat.

Gel Time

Catalyst level and temperature will influence the gel time. Gelcoat must not be used at temperatures under 15°C.

At 25°C geltime of Crystic 0209 SMK with 2% of Butanox M50 is 8 to 10 minutes.

The back up time of Crystic 0209 SMK with 2% of Butanox M50 is 50 – 60 minutes at 20°C.

At 25°C typical geltime of Crystic 0209 SMKW with 2% of Butanox M50 is 6.5 – 8.5 minutes.

The back up time of Crystic 0209 SMKW with 2% of Butanox M50 is 30 – 40 minutes at 20°C.

Recommended Testing

It is recommended that customers test all pigmented gelcoats before use under their own conditions of application to ensure the required surface finish is achieved.

Application

Application Temperature	18 – 20°C
Dilution	Ready for use
Catalyst	2% Butanox M50
Gun	Nozzle 20/10 to 30/10 mm or 421
Pressure	3 to 4.5 bars
Distance to mould	50 cm minimum
Wet Film Thickness	500 – 800 microns

Typical Properties

		Liquid Gelcoat
Viscosity at 25°C (Brookfield RVT Sp n°4, 3 rpm)	dPas	280 – 420
Specific Gravity at 25°C	-	1.25
Stability at 20°C	month	3
		Cured Gelcoat
Barcol Hardness (Model GYZJ 934-1)		35
HDT (1.8 MPa)	°C	75
Elongation at Break	%	2.8
Tensile Strength	MPa	68
Tensile Modulus	MPa	4050

(Curing schedule - Test According to BS 2782:1976)
1MPa = 1MN/m² = 1N/mm² = 10.2 kgf/cm

Packaging

Crystic Gelcoat 0209 SMK is supplied in 25 kg keg and 200 kg drums.

Storage

Crystic Gelcoat 0209 SMK should be stored in its original container and out of direct sunlight. 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.

Health & Safety

Please refer to Material Safety Data Sheet.

January 2010
Version 2