

Technical Information

NCS ULTRAGEL 22 P200 PA

NDS1205/675

BLACK BRUSH GELCOAT

DESCRIPTION

NCS ULTRAGEL 22 P200 PA is an isophthalic, black polyester gelcoat specially formulated to give excellent levelling and air release properties. The gelcoat is thixotropic and preaccelerated, with its viscosity and thixotropy having been optimised so that it flows evenly and sagging is minimised on inclined and vertical surfaces.

NCS ULTRAGEL 22 P200 PA is a resilient and impact-resistant gelcoat suitable for general mouldings where excellent durability and weather resistance are a requirement. The rheology of NCS ULTRAGEL 22 P200 PA ensures that it can be brush applied readily without the typical drag resistance and brush marks.

NCS ULTRAGEL 22 P200 PA is suitable for use on boat hulls that are subjected to long term immersion in water, and displays good resistance to a variety of chemical environments.

FEATURES	BENEFITS
Thixotropic	Eliminates drainage
Preaccelerated	Requires only the addition of the recommended catalyst
UV-stabilised	Improved weather resistance
Specially promoted	Rapid cure
Improved rheology	Excellent flow and levelling with low porosity
Prepigmented	Excellent opacity

The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute any other warranty expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials, and in no event shall we be liable for special, incidental, or consequential damages. Our standard conditions of contract will apply to all sales

OTHER VERSIONS

NCS ULTRAGEL 22 NAT PA	Natural brush viscosity version
NCS ULTRAGEL 22 NAT PA SV	Natural spray viscosity version
NCS ULTRAGEL 22 P100 PA	Super flow white brush gelcoat

TYPICAL LIQUID PROPERTIES

PROPERTY	SPECIFICATION	NCS TEST METHOD
Viscosity @ 25°C	45 000 - 65 000	5.3
Geltime @ 25°C, 2 phg* BUTANOX M50, minutes	6 - 12	8
Tack-free time (film), hours	15 minimum	25
Liquid appearance	Opaque Black	2
Stability in the dark @ 25°C, months	6 minimum	4.1
*phg = parts per hundred gelcoat, by mass		

CURING CHARACTERISTICS

NCS ULTRAGEL 22 P200 PA is supplied preaccelerated, needing only the addition of catalyst to start the curing reaction.

The recommended catalyst for NCS ULTRAGEL 22 P200 PA is BUTANOX M50 (or equivalent 50% solution of medium reactivity MEKP). Low reactivity 30% MEKP catalysts are not recommended.

Curing should not be carried out at temperatures below 15°C. NCS ULTRAGEL 22 P200 PA must be allowed to attain workshop temperature (23°C) before being used. Catalyst levels below 1% and above 3% are not recommended.

The following formulation is recommended at an ambient temperature of 25°C:

COMPONENT	PARTS BY WEIGHT
NCS ULTRAGEL 22 P200 PA	100
BUTANOX M50	2

APPLICATION

NCS ULTRAGEL 22 P200 PA is designed for application by brush. For normal mouldings, the wet gelcoat thickness should be controlled between 0,5mm and 0,6mm. As a guide, 550g to 650 g/m² of NCS ULTRAGEL 22 P200 PA, when applied, will give the required thickness.

The use of glass or synthetic fibre surface tissues will enhance the surface appearance and service life of the gelcoat.

NCS ULTRAGEL 22 P200 PA has been carefully formulated to give excellent brushing properties, designed to enhance levelling which promotes the uniformity of the gelcoat film thickness which translates into efficient utilisation of material. The thixotropy has been adjusted to eliminate sag on inclined and vertical surfaces. NCS ULTRAGEL 22 P200 PA exhibits rapid film curing characteristics resulting in short backup times, typically one hour for a gelcoat of cured film thickness of 0,5 mm cured with 2 phg BUTANOX M50 at 25°C. This short backup time facilitates achieving fast production rates and shorter overall mould turn-around times, without detracting from the smooth finish of the moulding.

The gelcoat is important for adhesion of the backing laminate. Modification of the gelcoat is not recommended as this will affect the properties which have been optimised.

STORAGE AND HANDLING

To ensure maximum stability and maintain optimum properties, polyester resin should be stored in closed containers, maintained below 25°C and away from heat sources and sunlight. All storage should conform to local fire and building codes. Drum stock should be kept to a reasonable minimum with first-in, first-out stock rotation.

Where bung-in-head containers are stored outside, it is recommended that these be stored in a horizontal position to avoid the ingress of water.

STANDARD PACKAGE

Non-returnable metal drums.
Bulk supplies can be delivered by road tanker.

MATERIAL SAFETY DATA SHEET

A Material Safety Data Sheet is available from your NCS Resins' representative. Make certain that you obtain a copy of this guide to the safe handling of unsaturated polyester resins and resin systems.

PLEASE READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET BEFORE WORKING WITH THIS PRODUCT

WARNING: CARE MUST BE TAKEN TO AVOID DIRECT MIXING OF ANY ORGANIC PEROXIDE (CATALYST) WITH METAL SOAPS, AMINE OR ANY OTHER POLYMERISATION ACCELERATOR OR PROMOTER, AS VIOLENT DECOMPOSITION WILL RESULT!

NCS RESINS BRANCHES AT:

JOHANNESBURG / DURBAN / CAPE TOWN / PORT ELIZABETH