

Polyester Resin HP-P21GC

- Gelcoat -

The Polyester System HP-P21GC is a pre-accelerated ISO/NPG Gelcoat with improved elasticity. It is in thixotropic condition for hand coating with high requirements.

Features & Benefits:

- unsaturated, high quality polyester resin, based in ISO/NPG
- wax free, tacky for further bonds / layers
- pre-accelerated (cobalt), high thixotropic index
- less surface cracking, because of higher flexibility
- high uv-stability, very good weather stability
- good chemical- and hydrolysis-stability
- very glossy and smooth surfaces
- areas of application: tank construction, containers, floating equipments, pools, ponds, modelling, car industry, vehicle parts ...
- viscosity modified for hand coating

Product Properties:

Mixing ratios	100 parts resin / 2 parts hardener (<i>by weight</i>)	
Mixed Viscosity	thixotropic	(details below)
Working Time (pot life)	15 - 20 minutes	(at 20 °C or 68 °F)
Demouldable after	24 h	(at 20 °C or 68 °F)
Full Cure	2 days	(at 20 °C or 68 °F)
Working Temperature (recommended)	18 - 25 °C	(59 - 77 °F)
Following layer(s) within	1 day	(at 20 °C or 68 °F)
Fully cure after	7 days	

Product Specifications:

Viscosity Resin	40.000 - 70.000	mPa * s	DIN 53015
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Data of unreinforced Resin:

Tensile strength	60	MPa	ISO 527
Elongation at break	5.1	%	ISO 527
Flexural strength	120	MPa	ISO 178
Impact resistance	11	kJ/m ²	ISO 179
E-Modulus	5000	MPa	ISO 527
Hardness	40	Barcol B	ASTM D 2583
Heat distortion temperature	> 80	°C	ISO R 75
Water absorption	0,3 / 0,5	% after 10d / 30d	

Specifications after curing 48h at 20 °C (68 °F) and 2% MEKP

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.

We recommend tests be performed for trials and suitability for the particular type of application. With the newest printing of this data sheet the previous version loose validity!

Safety instructions:

The safety instructions are to be taken as being of greatest importance.

Do not allow children to handle. Prevent inhalation of the fumes and contact with the bare skin.

Wear approved protective gloves and goggles. If ingested do not eat, drink or smoke.

Polyester resins contains ingredients which could be harmful if mishandled.

During the hardening process, energy can be released in the form of heat, hence a cooling/heat exchanging should be provided in order to prevent hot spots. Only mix the components in the recommended proportions in accordance with the instructions.

Application Instructions:

We recommend tests be performed for trials and suitability for the particular type of application. The system should only be used in the optimum temperature conditions (18-25°C). The relative air humidity should not be above 70%.

In respect of the safety instructions the resin and hardener should mixed in a suitable mixing vessel in accordance with characteristics given in the data sheet.

Deviating from the mixing recommendations can lead to incomplete hardening and through that loss of performance.

Ensure that the edges are well mixed using a stirring stick or a propeller type mixer. Localized signs of hardening indicate insufficient stirring and mixing of the components. Mixing of larger amounts (more than 100g) and higher temperatures (higher than 20°C) reduces the pot life time. Notably, if the temperature in the process go above 40°C then it is not possible to continue further, as the process will lead to a loss of certain characteristics and properties. Temperature increases can be reduced by pouring the mixture into flat painting trays.

Apply Gelcoat with paint-brush or roller. We recommend two layers for a better covering power.

Our advise: 500-600g/m² for a Gelcoat thickness of 0,4 - 0,5mm.

Before applying second layer, the first should cure enough.

For a good adhesion, the first layer should be tacky/sticky and we do generally recommend tests beforehand.

Cleaning work tools:

Unhardened product remains can be removed from tools by means of acetone or thinner XB. Tools should be given a good airing after being cleaned with these solvents, in order to prevent the solvent from being retained until the tool is used again in a process.

Hardened remains can only be removed by mechanical means such as grinding tools.

Storage:

Threaded container tops should be kept free of material remains. Do not exchange tops/lids. With optimal storage conditions, shelf-life should be 3 months.

Note: The cobalt accelerator can degrade by time!

Deliverable quantities:

Metal containers with safety fastening in the quantities 5 and 20 kg.

Larger containers can be obtained upon request.

Disposal:

Do not dispose of through the sewerage system, on areas of open water, or in the soil. Non-hardened remains of the product should be disposed of as hazardous waste. The hardened product waste should be treated as building rubbish or household rubbish.

Further Information:

Further application information can be obtained from our Internet site, by selecting Product Info on the homepage. Please do not hesitate to contact us by telephone if you have further queries.