

PRODUCT DESCRIPTION

ISO-PRO Gelcoat Tooling is a professional high-performance polyester neopentyl glycol isophthalic gelcoat. Designed especially for tooling applications. ISO-PRO Gelcoat Tooling will provide a very hard durable mould surface that can be polished to a high gloss finish.

ISO-PRO Gelcoat Tooling is recommended for professional applications such as marine, building and transport. The information in this data sheet covers all pigmented versions available.

KEY FEATURES AND BENEFITS

- NPG- Isophthalic base resin / Heat Resistance
- Easy to apply / Can be polished to a high gloss
- Excellent chemical resistance / Versatile

APPLICATION AND SETUP

Application Temperature	15-25°C
Catalyst	2% Butanox M50 or Granox C5 HQ
Wet film thickness	0.6 – 0.8mm
Brush Type	White Bristle, Solvent Resistant

CUSTOMER TESTING

It is recommended that customers test all gelcoats before use under their own conditions of application to ensure that the product meets requirements.

BRUSH APPLICATION TECHNIQUES

DO	DONT
Ensure the gelcoat is at ambient workshop temperature of 15°C - 25°C before use.	Stir the gelcoat with high shear mixers as this will temporarily break down the thixotropy leading to drainage.
Add 2% Butanox ® M50 or Granox C5 HQ.	Exceed a wet film thickness of 0.8mm as thick films encourage air retention. Using a Trojan wet film gauge is a must.
Gently stir the gelcoat by hand or low shear stirrer.	Apply excessive thickness in corner areas as this can cause pre-release.
Use long brush strokes and even pressure to the gelcoat to apply the gelcoat in an even film across the mould surface.	Apply backing laminate before the gelcoat has reached an appropriate degree of cure.
Brush through the gelcoat until the recommended wet film thickness is achieved of 0.6-0.8mm	Catalyse more gelcoat than can be applied before it starts to gel.
Apply the first layer of laminate with 24hrs of gelcoat curing to achieve optimum adhesion.	Allow vapour to be retained in deep mould sections as this can cause slow curing.

POST CURING

Good quality laminates for many applications can be made with ISO-PRO Gelcoats by curing at normal ambient temperatures (15°C - 25°C). However, for improved laminate properties, parts or molding should be cured at ambient temperature for 24hrs and then oven-cured at 40°C.

TYPICAL PROPERTIES – UNCURED

Property	Typical Value
Viscosity (Resin temperature 25°C, RVF Spindle #4/10RPM)	9000-12000
Specific Gravity (Resin temperature 25°C)	1.1
Styrene Content	34%

TYPICAL PROPERTIES – CURED

Property	Typical Value
Barcol Hardness (Model 931-1)	46
Water Absorption (24hrs at 23°C)	17mg
Heat Deflection Temperature †	83°C
Elongation at Break *	2.0%
Tensile Strength *	64 MPa
Tensile Modulus *	3800 MPa

* Curing Schedule – 24hrs at 20°C, 3hrs at 80°C

† Curing Schedule – 24hrs at 20°C, 5hrs at 80°C, 3hrs at 120°C

GEL TIME AND BACK TIME

Temperature	Gel Time *	Backup Time *
25°C	8-15 minutes	N/A

* 2% Butanox® M50 – Measured under laboratory conditions. Information should be used as a guide only.

PACKAGING AND STORAGE

ISO-PRO Gelcoat Tooling is available in 4kg, 23kg Pails and 210kg Drums.

ISO-PRO Gelcoat Tooling should be stored in its original container, under cover and out of direct sunlight. Containers must be kept closed and airtight. It is recommended that the storage temperature should be less than 25°C and the product should not be frozen. Storing the product outside of these conditions will affect the properties of the product and reduce shelf life. Containers should only be opened immediately before use.

HEALTH AND SAFETY

Please read and understand the separate safety data sheet before using this product.

DISCLAIMER

All information in this data sheet is based on laboratory testing and is not intended for design purposes. Trojan Fibreglass makes no representations or warranties of any kind concerning this data. Due to variance in storage, handling and application of these materials, Trojan Fibreglass cannot accept liability for results obtained.

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