

Technical Datasheet

INEOS Composites

AROPOL™ F 207 TPB Flame Retardant Resin

AROPOL F 207 TPB is a flame retardant, orthophthalic acid based, polyester resin of low viscosity. AROPOL F 207 TPB resin is easy to apply and styrene emission is low.

Typical liquid resin properties at 23 °C

	Value	Unit	Method
Viscosity, Brookfield RV2, 10 rpm	1200	mPas	ISO 2555
Viscosity, cone&plate	230	mPas	ISO 2884
Styrene content	39	%	SFS 4864
Density	1,1	kg/dm ³	ISO 2811
Geltime, 1% MEKP-50	45	min	D006
Peak exotherm	140	°C	D006

Typical cured resin properties

	Value	Unit	Method
Tensile strength	55	MPa	ISO 527
Tensile modulus	3600	MPa	ISO 527
Elongation at break	2,5	%	ISO 527
Flexural strength	120	MPa	ISO 178
Flexural modulus	3300	MPa	ISO 178
Heat deflection temperature	75	C	ISO 75 (A)
Water absorption, 24 hours	19	mg/sample*	ISO 62-80
Water absorption, 28 days	90	mg/sample*	ISO 62-80
Hardness	45	Barcol	ASTM D2583
* 50x50x4 mm*			
Oxygen index	23,5	%	ASTM D-2863-70

Application and use

AROPOL F 207 TPB flame retardant resin is suitable for hand lay-up and spray-up applications and is recommended for use in manufacturing of boats, life boats, mass transit etc..

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Certificates and approvals

Lloyd's Register of Shipping has approved AROPOL F 207 TPB resin together with Maxguard NP gelcoat for manufacturing of survival craft and rescue boats. AROPOL F 207 TPB complies with Det Norske Veritas (Class 2) and Germanischer Lloyds for construction of small crafts. AROPOL F 207 TPB resin together with Enguard GE gelcoat complies with ECE Regulation 118R02 except for requirements in §8 of the Regulation and in appendix 2 to revised 1958 Agreements.

The manufacturing, quality control and distribution of products, by INEOS Composites, are complying with one or more of the following programs or standards: ISO 9001, ISO 14001 and OHSAS 18001 by .

Handling and storage

It is highly recommended that all material is stored at stable temperatures under 20°C preferably indoors, and away from direct sunlight. Prolonged storage or storage outside of recommended conditions can influence liquid resin properties like viscosity and gel time. It is also strongly recommended to mix resin thoroughly before use. Shelf life of AROPOL F 207 TPB is three (3) months.

The user is responsible to familiarise with the material handling and safety datasheet prior to the use of the product.

Notice

All information presented herein is believed to be accurate and reliable, and is solely for the user's consideration, investigation and verification. The information is not to be taken as an express or implied representation or warranty for which INEOS Composites assumes legal responsibility. Any warranties, including warranties of merchantability, fitness for use or non-infringement of intellectual property rights of third parties, are herewith expressly excluded.

Since the user's product formulations, specific use applications and conditions of use are beyond the control of INEOS Composites, INEOS Composites makes no warranty or representation regarding the results which may be obtained by the user. It shall be the sole responsibility of the user to determine the suitability of any of the products mentioned for the user's specific application.

INEOS Composites requests that the user reads, understands and complies with the information contained herein and the current Material Safety Data Sheet.