

Synolite™ 1112-G-5

Unsaturated polyester Casting resin for Cultured marble and Polymer concrete

Synolite™ 1112-G-5 is a polyester resin manufactured from recycled PET (22-24%), which can be easily processed in casting processes.

The low resin viscosity allows for obtaining high filler loadings. The resin is often used behind a gelcoat in sanitary applications, as well as for industrial components in polymer concrete.

Benefits

- Dimensional predictability through low resin shrinkage and high filler loading
- Easy processing
- Cost efficiency associated with high filler loading
- High renewable content, based on post-consumer recycled PET (22-24 %)

AOC Next® Product



Synolite™ 1112-G-5 is a resin made from recycled PET feedstock. For that reason the resin has received the AOC Next® Eco-label for Sustainable Products and Solutions.

Major applications

Synolite® 1112-G-5 is particularly suitable for the production of components through casting processes, often used in sanitary and bathroom applications.

Product Specifications

Property	Value	Unit	TM
Appearance	Green; Hazy		TM 2265
Solids content	59 - 63	%	TM 2033
Viscosity 25 °C, Brookfield	400 - 430	mPa.s	TM 7000
Gel time 25 until 35 °C	20 - 24	min	TM 2625
Peak time	27 - 35	min	TM 2625
Peak temperature	120 - 160	°C	TM 2625

Viscosity measurement: RV#2 @ 50 rpm 60 sec @ 25°C.

Reactivity determined with 100g Resin, @ 25°C, Catalyze 1.5% Butanox M-50 Medium reactive MEKP

Liquid resin typical properties

Property	Value	Unit	TM
Flash point	33	°C	TM 2800
Stability (no initiator, dark, 25°C)	6	month	

Unfilled castings typical properties

Property	Value	Unit	TM
Tensile strength	83	MPa	ISO 527-2
Tensile modulus	3.2	GPa	ISO 527-2
Elongation at break	3.7	%	ISO 527-2
Flexural strength	137	MPa	ISO 178
Flexural E-Modulus	3.5	GPa	ISO 178
Outer fiber strain	4.9	%	ISO 178
HDT	93	°C	ASTM D648

FOOTNOTES (1) All tests performed on unreinforced cured resin castings. Thixotropic components if applicable, are excluded from casting samples. Castings were post-cured. (2) The gel times shown are typical but may be affected by catalyst, promoter and inhibitor concentrations and resin, mold and shop temperature. Variations in gelling characteristics can be expected between different lots of catalysts and at extremely high humidities. Pigment and fillers can retard or accelerate gelation. It is recommended that the fabricator check the gelling characteristics of a small quantity of resin under actual operating conditions prior to use.

Storage Guidelines

The resin should be stored indoors in a dry place at temperatures between 5°C and 30°C, in the original, unopened, 100% light-tight and undamaged packaging.

The properties of the resin may change slightly during storage. Shelf life is shorter at higher temperatures.

It is recommended to mix the material before use in production

Material Safety

A Material Safety Data Sheet of this product is available on request.

Test Methods

Test methods (TM) referred to in the table(s) are available on request.

ISO 9001:2015 Certified

The Quality Management Systems at every AOC manufacturing facility have been certified as meeting ISO 9001:2008 standards. This certification recognizes that each AOC facility has an internationally accepted model in place for managing and assuring quality. We follow the practices set forth in this model to add value to the resins we make for our customers.

AOC. Trusted Solutions

AOC is the leading global supplier of resins and specialty materials which enable customers to create robust, durable and versatile products and components. With strong capabilities around the world in manufacturing and science, the company works closely with customers to deliver unrivaled quality, service and reliability for today, and create innovative solutions for tomorrow. Partner with AOC and we will work together to find the right solutions for your business.

Contact us for more information

We will help you choose the right resin solution.

Tel.: + 45 4485 0500
web@monofiber.dk

Monofiber
KOMPOSIT INDUSTRIENS BEDSTE BRANDS

AOC
Trusted Solutions

AOC is a registered trademark of the AOC group of companies.

The user is held responsible for checking the quality, safety and all other properties of our products prior to use. The information and recommendations contained herein are to the best of our knowledge accurate and reliable, but no rights whatsoever may be derived by any party other than those expressly agreed to with a selling entity of the AOC group of companies in a legally binding agreement. AOC hereby makes no warranty of any kind, express or implied, including those of merchantability and fitness for purpose. Unless explicitly agreed to in writing by AOC otherwise, all offers, quotations, sales and deliveries of AOC products are subject to the general conditions of sale of AOC. Atlac®, Beyone®, Daron®, NeoMould®, Neoxil®, Palatal®, Palapreg®, Synolite™, the AOC™ name, the AOC™ logo, the NEXT™ logo and the Trusted Solutions™ logo are the registered trademarks of the AOC group of companies

For more information: aocformulations.com