

Neomould® 2017-S-1

Zero shrinkage resin for making composite Tooling through Hand lay-up processes

Neomould® 2017-S-1 feature zero shrinkage during cure and has a low peak exotherm (both in thin and thock layers).

Consequently the resin is the ideal choice for making molds with both great surface quality and dimensional stability.

Benefits

- Great surface quality.
- Suitable for thick laminate because of low peak exotherm and thixotropic behavior.
- Easy processing through excellent fiber wetting.
- Resin color allows for easy control of air bubbles during lamination.
- Durable and long-lasting molds.

Major Applications

Neomould® 2017-S-1 is a novel tooling resin, setting new standards in composites tool manufacturing and bringing multiple benefits to the professional toolmaker. The zero-shrinkage feature of Neomould® 2017-S-1 resin enables to make parts that perfectly mirror plug surface and dimensions.

At the same time the processing of the resin is fairly easy and robust. Because of the thixotropic nature of Neomould® 2017-S-1 resin and high viscosity at low shear rates, the application on vertical surfaces can be done without sagging. The low viscosity at high shear rates, makes the resin easy to apply in Hand lay-up and Spray-up processes.

Neomould® 2017-S-1 was developed for easy processing with good wet out of fiber reinforcement. The color of the resin allows easy control of air pockets and bubbles during laminating. The resin exhibits tack free cure without negative effect on secondary bonding. Enhanced thixotropic behavior allows buildup of thicker laminate layers in one go without slip or drain from vertical surfaces.

Product Specifications

Property	Value	Unit	TM
Gel time	22 - 25	min	TM 2625
Peak temperature	145 - 165	°C	TM 2625
Peak time	30 - 38	min	TM 2625
Appearance	Hazy		TM 2265
Solids content	62 - 65	%	TM 2033

Viscosity measurement: Z3/23°C. Reactivity measurement: 2.0 g (MEKP) Medium reactive Methyl Ethyl Ketone Peroxide added to 100 g resin.

Liquid resin typical properties

Property	Value	Unit	TM
Density	1330	kg/m ³	TM 2160, 20 °C
Flash point	33	°C	TM 2800
Stability	4	Month	TM 2303, 25 °C, dark

Unfilled castings typical properties

Property	Value	Unit	TM
HDT	80	°C	ASTM D648 264 psi

Cured reinforced resin typical properties

Property	Value	Unit	TM
Flexural modulus	3.9	GPa	ISO 178
Tensile strength	47	MPa	ISO 527-2
Tensile Elongation	1.8	%	ISO 527-3
Flexural strength	60	MPa	ISO 178
Longitudinal shrinkage	0	%	
Tensile modulus	5.6	GPa	ISO 527-2

Cured with 2.0% (MEKP) Medium reactive Methyl Ethyl Ketone Peroxide, for 24 h. at room temperature, following by 16 h. at 60°C.

Brochures

More information about Neomould® 2017-S-1, and tips and tricks for making composite tools can be found in the AOC Tooling Brochure.

Storage Guidelines

The resin should be stored indoors in a dry place at temperature tight and undamaged packaging.

The properties of the resin may change slightly during storage.

Material Safety

A Safety Data Sheet (SDS) 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 9001:2015 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 specialty formulations and solutions which enable customers to create robust, durable, and versatile products and components for applications in Coatings and Protective Barriers, Colorants and Visual Effects, Adhesives and Specialties, and conventional Composites. With strong capabilities worldwide 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.

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