# **Synolite™ 1967-G-1**

# Low shrinkage DCPD resin, yielding great surface quality in Light RTM

Synolite<sup>™</sup> 1967-G-1 is a low viscous unsaturated DCPD based polyester resin ideally suited for Light RTM. Fast resin cure and short cycle times are possible with AAP Peroxide.

The low resin shrinkage results in components with great surface quality.

#### **Benefits**

- · Great surface quality
- Short cycle times
- Easy injection because of low viscosity
- DNV approved

#### **Major Applications**

Synolite™ 1967-G-1 is recommended for injection applications with a rigid top-mold to produce high performance constructional laminates. Synolite™ 1967-G-1 can be used with all commonly used types of glass reinforcement.

Synolite<sup>™</sup> 1967-G-1 is a medium reactive, pre accelerated resin that gives a relatively low peak exotherm. This resin has been specially developed for better demolding properties and lower shrinkage.

Synolite<sup>™</sup> 1967-G-1 can be used for thick and thin laminates and shows a good through cure. Synolite<sup>™</sup> 1967-G-1 has very good fiber wetting and impregnation properties.

# Certifications and Approvals

This resin has a Det Norske Veritas approval, grade 2 for boat building.

Product Specification					
Property	Value	Unit	TM		
Appearance	Clear		TM 2265		
Solids content	62.5 - 65.5	%	TM 2033		
Viscosity 23 °C, 100 s <sup>-1</sup>	195 - 220	mPa.s	TM 2013		
Gel time 25 until 35 °C	7 - 10	min	TM 2625		
Peak time	15 - 21	min	TM 2625		
Peak temperature	115 - 145	°C	TM 2625		

Viscosity measurement TM 2013 at 23°C: Physica, spindle Z2, shear rate 100 s<sup>-1</sup>, 23°C. Curing conditions TM 2625, 25°C: 2.0 g Medium reactive Methyl Ethyl Ketone Peroxide (MEKP) in 100 g resin

Liquid resin typical properties					
Property	Value	Unit	TM		
Density 25 °C	1150	kg/m³	TM 2160		
Flash point	33	°C	TM 2800		
Stability Solid dark 25 °C	6	month			
Color	Brown	-			



Unfilled castings typical properties					
Property	Value	Unit	TM		
Density 23 °C	1200	kg/m³	DIN 53479		
Tensile strength	70	MPa	ISO 527-2		
Tensile modulus	3.8	GPa	ISO 527-2		
Elongation at break	2.3	%	ISO 527-2		
Flexural strength	130	MPa	ISO 178		
Flexural E-Modulus	3.8	GPa	ISO 178		
HDT ISO 75 Ae	85	°C	ISO 75 Ae		
Metric volume shrinkage	6	%			
Impact strength	15	kJ/m²	ISO 179		

Cured with 1% Medium reactive Methyl Ethyl Ketone Peroxide (MEKP). Post cured 24 h at RT followed by 24 h at 70°C.

# **Application Guidelines**

Before use, the resin should be conditioned and stirred at well defined, application dependent temperature (usually 15°C minimum for a MEKP / Cobalt cure).

## **Storage Guidelines**

The resin should be stored indoors in the original, unopened and undamaged packaging, in a dry place at temperatures between 5°C and 30°C and the properties might change during storage. Shelf life is reduced at higher temperatures and the properties of the resin might change during storage.

The shelf life of styrene containing unsaturated polyesters will be significantly reduced when exposed to light. Store in dark and in 100% light tight containers only.

### **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 9001:2015 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 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





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. Altek®, Atlac®, Beyone®, Daron®, FirePel®, NeoMould®, Neoxil®, Palatal®, Palapreg®, Pultru®, Synolite™, Vipel®, the AOC™ name, the AOC™ logo and the Trusted Solutions™ logo are the registered trademarks of the AOC group of companies

For more information: aocresins.com