

Synolite™ 0035-N-3

Laminating resin with improved chemical resistance

Synolite™ 0035-N-3 is an unsaturated polyester resin used in constructional laminating of pipes and ducts, containers etc. where improved chemical resistance and mechanical properties are required.

Benefits

- Very good mechanical properties
- Increased resistance to elevated temperatures
- Continuity of operation through great chemical resistance
- Track record of performance

Major Applications

Synolite™ 0035-N-3 is a resin with very good mechanical and thermal properties. The chemical resistance of this resin can easily be compared with Isophthalic acid/NPG based resins.

Synolite™ 0035-N-3 is recommended for constructional laminating of pipes and ducts, containers etc. where improved chemical resistance and mechanical properties are required.

This resin is also very suitable for filler/ resin sanitary ware castings.

Certifications and Approvals

Non-reinforced cured Synolite™ 0035-N-3 conforms to type 1140 according to DIN 16946 part 2 and is classified in group 3 according to DIN 18820/1.

Product Specifications

Property	Value	Unit	TM
Appearance	Clear; Slightly hazy		TM 2265
Solids content	62 - 65	%	TM 2033
Viscosity 23 °C, 100 s ⁻¹	1000 - 1500	mPa.s	TM 2013
Gel time 25 until 35 °C	4 - 10	min	TM 2625
Peak time	15 - 35	min	TM 2625
Peak temperature	120 - 170	°C	TM 2625

TM 2013: Z2/100 s⁻¹/23°C. TM2625, 25°C : 0.5g 1% Cobalt Octoate solution + 1.0g Medium reactive (MEKP) Medium reactive Methyl Ethyl Ketone Peroxide in 100g resin.

Liquid resin typical properties

Property	Value	Unit	TM
Density 23 °C	1100	kg/m ³	TM 2160
Flash point	33	°C	TM 2800
Stability (no initiator, dark, 25°C)	6	month	

Unfilled castings typical properties

Property	Value	Unit	TM
Tensile strength	67	MPa	ISO 527-2
Tensile modulus	3.5	GPa	ISO 527-2
Elongation at break	2.3	%	ISO 527-2
Flexural strength	130	MPa	ISO 178
Flexural E-Modulus	3.7	GPa	ISO 178
HDT	103	°C	ASTM D648
Impact strength	10	kJ/m ²	ISO 179

Curing agents: 0.5% Cobalt accelerator (1%) + 2% (MEKP) Medium reactive Methyl Ethyl Ketone Peroxide.

Post cured for 24 h at RT followed by 24 h at 60°C and 24 h at 80°C.

Application Guidelines

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

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.

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 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 to choose the right resin solution.

emea@aocresins.com

Europe, Middle East & Africa
+41 52 6441212
emea@aocresins.com

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 and the Trusted Solutions™ logo are the registered trademarks of the AOC group of companies

For more information: aocresins.com