

Synolite™ 8388-P-7

Multi-purpose Hand lay-up resin with low shrinkage and Low Styrene Emission capability

Synolite™ 8388-P-7 is a versatile low viscous DCPD resin for Hand lay-up and Spray-up processes with Low Styrene Emission (LSE) system.

The resin provides great surface quality because of inherent low shrinkage. It is particularly suited for Marine applications and is DNV approved.

Benefits

- Components with great surface quality
- Excellent wet out of powder-bond CSM mats
- Manufacturing of both thin and thick laminates
- Easy trimming capability independent of thickness
- Better workshop conditions through low Styrene emission

Major Applications

Synolite™ 8388-P-7 has been especially developed for hand lay-up and spray-up applications to produce high performance constructional laminates.

Synolite™ 8388-P-7 combines good mechanical properties with optimal process ability. This resin shows very good fiber wetting and impregnation properties. Thick laminates can be made in one go due to the low exothermic heat development, good through cure and relatively low shrinkage.

An optimized LSE system has been developed to get excellent Low Styrene Emission. A color change system is present for the benefit of spray-up applications.

Synolite™ 8388-P-7 can be used with powder and emulsion bound mats.

Certifications and Approvals

Synolite™ 8388-P-7 does meet "Det Norske Veritas" (DNV) Tentative Rules for Classification and Classification of Boats 1997, Grade 2.

Product Specification

Property	Value	Unit	TM
Appearance	Hazy		TM 2265
Solids content	60 - 63	%	TM 2026N
Viscosity 23 °C, 2 s ⁻¹	920 - 1380	mPa.s	TM 2313
Viscosity 23 °C, 20 s ⁻¹	310 - 380	mPa.s	TM 2313
Viscosity 23 °C, 250 s ⁻¹	180 - 210	mPa.s	TM 2313
Acid value	13 - 22	mg KOH/g	TM 2401
Gel time 25 until 35 °C	24 - 29	min	TM 2625
Peak time	45 - 65	min	TM 2625
Peak temperature	75 - 115	°C	TM 2625

Viscosity measurement: Physica MC1+/Z2/23°C. Curing conditions: 2,0 g Medium reactive Methyl Ethyl ketone peroxide (MEKP) added to 100 g of 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 Solid dark 25 °C	6	month	
Color	Blue	-	

Unfilled castings typical properties

Property	Value	Unit	TM
Density 23 °C	1170	kg/m ³	DIN 53479
Tensile strength	70	MPa	ISO 527-2
Tensile modulus	3.7	GPa	ISO 527-2
Elongation at break	2.2	%	ISO 527-2
Flexural strength	125	MPa	ISO 178
HDT ISO 75 Ae	85	°C	ISO 75 Ae
Metric volume shrinkage	6	%	ISO 3521
Impact strength	18	kJ/m ²	ISO 179

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

Application Guidelines

Synolite™ 8388-P-7 contains barrier forming agents to reduce emission of styrene. These agents may reduce the bonding strength of over laminates. Good strength can be obtained with over laminating of the base laminate after delayed lay-up if the surface is not too resin rich. In other cases the surface

The resin should be conditioned at 15°C minimum before use to obtain a sufficient cure when MEKP is used as a curing system. Stir the resin before use.

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 25°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 monomer containing unsaturated polyesters will be significantly reduced when exposed to light. Store in dark and in 100% light tight containers only.

From DCPD resins it is known that skin formation occurs when exposed to air ventilation or replacement from the original packaging.

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

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. 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