# Palapreg® P 145-01

## Pure maleic unsaturated polyester resin for Low Shrinkage applications

**Palapreg® P 145-01 is intended for SMC and BMC production. It has a good compatibility with Low Profile additives and can be used in low shrink SMC / BMC applications for very good surface quality. Moldings made with Palapreg® P 145-01 show excellent homogeneous pigmentation.**

### Benefits

- Very good surface quality (low shrinkage)
- High gloss components for visually demanding applications
- Excellent and homogeneous pigmentation

### Major Applications

Building & Infrastructure, Electrical, Transportation.

### Product Specification

| Property | Value | Unit | TM |
|---|---|---|---|
| Appearance | Clear | | TM 2265 |
| Solids content | 65.5 - 67.5 | % | TM 2033 |
| Viscosity 23 °C, 100 $s^{-1}$ | 1500 - 1800 | mPa.s | TM 2013 |
| Acid value | 15 - 18 | mg KOH/g | TM 2401 |
| Gel time | 75 - 103 | s | TM 2261 |
| Peak time | 115 - 145 | s | TM 2261 |
| Peak temperature | 265 - 295 | °C | TM 2261 |
| Water content | 6 - 14 | ppm | TM 2350 |

Viscosity: Z2/100/23°C; Condition: at 130°C, 100 g resin, 1 g tert-butyl peroxy benzoate; Reactivity measured with 1g t-Butyl peroxybenzoate added to 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 Solid dark 25 °C | 3 | month | |

AOC
Trusted Solutions

| Unfilled castings typical properties | | | |
|---|---|---|---|
| Property | Value | Unit | TM |
| Tensile strength | 61 | MPa | ISO 527-1 |
| Tensile modulus | 39 | GPa | ISO 527-1 |
| Elongation at break | 24 | % | ISO 527-1 |
| HDT ISO 75 Ae | 133 | ℃ | ISO 75 Ae |

## Application Guidelines

Palapreg® P 145-01 is usually processed into standard SMC / BMC, or together with Palapreg® LPAs into low shrink / low profile SMC and BMC. As a rule, the ratio of Palapreg® P145-01 and high polymer solution is 60:40, but it can be varied if necessary. Depending on the size of the molded part it is recommended to add 300 to 600 ppm p-benzoquinone to the system (calculated on UP-resin plus LPA).

## 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.

AOC
Trusted Solutions

## 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. 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**

021573 - 20200911_7:40:23_V7