

# Synolite™ 7412-G-1

## Isophthalic resin for RTM/Infusion

Synolite™ 7412-G-1 is a pre-accelerated Isophthalic resin formulated for RTM and Vacuum infusion applications.

Components made from Synolite™ 7412-G-1 feature enhanced chemical resistance and great mechanical properties.

### Benefits

- Great mechanical properties
- Enhanced chemical resistance
- Easy processing and fast cure
- Low inherent color
- BS 3532 Type approval

## Major Applications

Synolite™ 7412-G-1 is particularly suitable for resin transfer molding (RTM) and filament winding. The resin is light colored and fast curing.

## Certifications and Approvals

Synolite™ 7412-G-1 conforms to BS 3532 Type B.

## Product Specifications

Property	Value	Unit	TM
Appearance	Clear; Slightly hazy		TM 2265
Solids content	53,5 - 56,5	%	TM 2033
Viscosity 23 °C, 100 s <sup>-1</sup>	204 - 276	mPa.s	TM 2313
Acid value	5 - 11	mg KOH/g	TM 2401
Gel time 25 until 35 °C	28 - 38	min	TM 2625
Peak time	30,4 - 45,6	min	TM 2625
Peak temperature	120 - 150	°C	TM 2625

TM 2013: Physica MC1+ \ Z 2 \ 100s<sup>-1</sup> \ 23°C. TM 2625: 100g resin + 1.0g Acetyl acetone peroxide (AAP).

## Liquid

Property	Value	Unit	TM
Density 25 °C	1040	kg/m <sup>3</sup>	TM 2160
Flash point	33	°C	TM 2800
Stability (no initiator, dark, 25°C)	3	month	

## Solid Unfilled

Property	Value	Unit	TM
Density 23 °C	1200	kg/m <sup>3</sup>	DIN 53479
Tensile strength	61	MPa	ISO 527-2
Tensile modulus	2.8	GPa	ISO 527-2
Flexural strength	106	MPa	ISO 178
Flexural E-Modulus	28	GPa	ISO 178
HDT	73	°C	ASTM D648
Water absorption	20	mg	ISO 62

## Application Guidelines

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

## 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.

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### Contact us for more information

We will help you to choose the right resin solution.

[emea@aocresins.com](mailto:emea@aocresins.com)

Europe, Middle East & Africa  
+41 52 6441212  
[emea@aocresins.com](mailto:emea@aocresins.com)

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