

# Synolite™ 0175-N-1

## DCPD-based Pultrusion and hot press molding resin, for making profiles and structural components

Synolite™ 0175-N-1 is a DCPD resin used in hot press molding and pultrusion. Typical applications are in the field of electrical engineering, building and transport.

Because of its low intrinsic shrinkage, parts made from Synolite™ 0175-N-1 resin demonstrate great surface quality.

### Benefits

- Great surface quality because of inherent low shrinkage
- Easy processing
- Increased pultrusion line speed as a result from great fiber wet out
- Mechanical integrity at elevated temperatures

## Major Applications

Synolite™ 0175-N-1 is recommended for a wide range of Pultrusion profiles. Particular where high structural performance and/or good chemical resistance are desirable.

Key features of the Synolite™ 0175-N-1 resin are optimal wetting of the glass fiber, medium reactivity, good mechanical properties, and a high HDT.

To obtain the best results with Synolite™ 0175-N-1 resin it is necessary to choose the optimal curing system and processing temperature for the application.

## Product Specifications

Property	Value	Unit	TM
Appearance	Clear		TM 2265
Solids content	64 - 67	%	TM 2033
Viscosity 23 °C, 100 s <sup>-1</sup>	330 - 430	mPa.s	TM 2013
Gel time 82 °C	6,5 - 8,5	min	TM 2253
Peak time	9 - 11	min	TM 2253
Peak temperature	205 - 225	°C	TM 2253
Stability 120 °C	210	min	TM2300C

Curing conditions TM 2253: 100g resin + 2.0 g Dibenzoyl peroxide 50%. Viscosity measurement: Physica MC1+ / Z2 / 100s<sup>-1</sup>.

## Liquid

Property	Value	Unit	TM
Flash point	33	°C	TM 2800
Stability (no initiator, dark, 25°C)	6	month	

## Solid Unfilled

Property	Value	Unit	TM
Tensile strength	60	MPa	ASTM D638
Tensile modulus	3.7	GPa	ASTM D638
Elongation at break	2.5	%	ASTM D638
HDT 264 psi	95	°C	ASTM D648

After 3 hours post curing at 100°C.

## Application Guidelines

Before use, the resin should be conditioned at a welldefined, 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 tempera tight and undamaged packaging.

The properties of the resin may change slightly during storag

## 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

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### Contact us for more information

We will help you to choose the right resin solution.

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