

# Synolite™ 0542-U-2

## Multi-purpose semi-rigid DCPD resin for Putty applications

Synolite™ 0542-U-2 is a high reactive DCPD resin that can be easily converted into putties and surface fillers.

Putty formulations made with Synolite™ 0542-U-2 resin are particularly used for car repair. Once cured, putties based on this resin have excellent sandability without clogging sanding paper.

### Benefits

- High versatility for optimizing customer-specific putty formulations
- Great sandability
- High heat resistance enabling paint/lacquer cure at elevated temperatures
- Excellent shelf life of formulated putty
- Great adhesion to metal surfaces

## Major Applications

Synolite™ 0542-U-2 is designed for use in the manufacturing of car repair putties, providing rapid early cure and tack-free surface when cured.

Synolite™ 0542-U-2 has a medium viscosity, and medium reactivity. It gives very good wetting of fillers. After curing, the resin is semi-rigid, facilitating fast surface curing combined with a high resistance to heat deflection.

The polymeric amine curing system allows rapid through hardening, also at lower temperatures. In addition, staining of coatings applied on the putty is strongly reduced due to this state of the art curing system.

Storage stability of putties made from Synolite™ 0542-U-2 is excellent. Synolite™ 0542-U-2 putties show very good adhesion to metal substrates, wood and polyester.

## Product Specifications

Property	Value	Unit	TM
Appearance	Clear		TM 2265
Solids content	62 - 65	%	TM 2033
Viscosity 23 °C, 100 s <sup>-1</sup>	640 - 780	mPa.s	TM 2013
Acid value	6 - 12	mg KOH/g	TM 2401
Gel time 25 until 35 °C	8 - 10,5	min	TM 2625
Peak time	11 - 14	min	TM 2625
Peak temperature	125 - 145	°C	TM 2625
Stability 120 °C	180	min	TM2300C

TM 2013: Z2\100s<sup>-1</sup>\ 23°C.

Cond: TM 2625: 100g + 2.0g 50% BPO peroxide.

Cond: TM 5203: 100g + 1.0g 50% BPO peroxide.

## Liquid resin typical properties

Property	Value	Unit	TM
Density 23 °C	1120	kg/m <sup>3</sup>	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 modulus	2.5	GPa	ISO 527-2
Elongation at break	11	%	ISO 527-2
HDT	56	°C	ASTM D648
Shore D Hardness	68		TM 2602

TM 5203: 100g resin + 1.0g 50% benzoyl peroxide powder.

## Application Guidelines

This putty resin cures by the addition of benzoyl peroxide (BPO), without the application of external heat.

Typical starting formulation (total weight 1000): Synolite 0542-U-2 300, Thixcin E (Elementis Specialties) 10, Micro talc FGT 200 (Norwegian Talc) 475, titanium dioxide 2160 (Kronos Europe) 50, barium sulfate EWO (Sachtleben) 140, styrene 25.

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 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

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### Contact us for more information

We will help you to choose the right resin solution.

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