

GENIOPERL® W35

Siliconmodifier

GENIOPERL® W35 is a polymer modifier with a linear structure based on a functionalized silicone. It is used mainly as a toughening additive for epoxy resins and composites.

Properties

GENIOPERL® W35 improves the impact strength of thermoset polymer systems like epoxy- or vinylester resins, especially at low temperatures. We recommend additions of 2 - 8 wt. % for thermosets, in each case relative to the unfilled resin / curing agent or polymer system.

Cured thermoset materials containing GENIOPERL® W35 show increased mechanical impact strength and fracture toughness and also much higher resistance to thermally induced stress.

Due to the typically low addition content of GENIOPERL® W35 the viscosity and the curing kinetics of the uncured resin as well as the glass transition temperatures of the cured resins remain almost unaffected. The modulus of the cured resin is only slightly affected by addition of GENIOPERL® W35.

The addition of GENIOPERL® W35 to e.g. epoxy based coating or adhesion formulations will improve the adhesion strength as well as the impact resistance of the respective coatings significantly.

Technical data

General Characteristics

Property	Condition	Value	Method
Melting point	1013 hPa	50 °C	OECD 102

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Store in a dry and cool place.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be downloaded via WACKER web site <http://www.wacker.com>.

Applications

- Dispersible Impact Modifiers
- Plastic Additives

Application details

The use of GENIOPERL® W35 in cycloaliphatic epoxy resins or epoxy resins cured by carboxylic acid anhydrides is particularly recommended.

GENIOPERL® W35 is incorporated into polymer systems by dispersion in monomer or resin blends prior to curing at temperatures between 50 °C and 80 °C. We recommend processing temperatures of at least 50 °C for optimum dispersion. We also recommend the use of rotor-stator systems or simple blade like stirring systems.

Packaging and storage

Packaging

- 1 kg bottle pellets
- 30 kg drum pellets
- 120 kg drum pellets
- 180 kg drum block

Storage

The 'Best use before end' date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

QR Code GENIOPERL® W35



For technical, quality or product safety questions, please contact:

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