

GENIOSIL[®] XT 120



Silane-Modified Polymers

GENIOSIL[®] XT 120 is a silane terminated binder based on alpha-silane technology for the formulation of high-strength adhesives and coatings.

Properties

GENIOSIL[®] XT 120 is dedicated for adhesive formulations, which need a higher modulus accompanied with less elongation or as a flexible coating.

Isocyanate free

Very low viscous

Clear and Transparent

Tin-free catalysis

Rapid curing to a non-tacky surface

Broad adhesion profile

Long shelf life of end product

Technical data

General Characteristics

Property	Condition	Value	Method
Density	20 °C 1000 hPa	1.14 g/cm ³	DIN 51757
Flash point	-	97 °C	ISO 2719
Ignition temperature (liquids)	-	391 °C	EN 14522
Polymer	-	silane terminated polymer	-
Viscosity, dynamic	20 °C	140 mPa-s	Brookfield

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.

Applications

- Building & Construction Adhesives
- Assembly Adhesives
- Industrial Adhesives
- Adhesives

Application details

GENIOSIL® XT 120 can be readily dissolved in standard organic solvents. It is insoluble in aqueous media and reacts with the release of methanol, forming a resinous deposit.

The low glass transition temperature allows stable mechanical properties over a wide temperature range. The polymer cures at ambient temperature in the presence of both moisture and catalyst. Formulations show good adhesion to a wide variety of substrates even without priming.

GENIOSIL® XT 120 can be formulated by conventional methods and mixing processes. The composition of a given system depends on the required property profile.

However, its reactivity with water and atmospheric humidity must be taken into account during storage and processing. Therefore, it is imperative to ensure material handling is in the absence of moisture (e.g. inert gases).

In order to modify the hardness or the elongation of any GENIOSIL® XT 120 based formulation it is recommended to use a GENIOSIL® STP-E binder. Any other plasticizer could lead to migration after curing. Nevertheless a combination of both offers better elongation and tear resistance performance. It has been observed, that PPG types give extraordinary mechanical performance whereas aromatic plasticizers like Trimellitates or Phthalates results in good adhesion properties. Water scavengers can be added to stabilize the formulations against premature curing as this is moisture-curing technology. Therefore exclusion of moisture during compounding and storage is necessary. GENIOSIL® XL 10 or GENIOSIL® XL 70 are particularly suitable scavengers.

Antioxidants, HALS and UV-stabilizers can be added to GENIOSIL® XT 120 formulations to avoid degradation reactions. Furthermore, systems based on GENIOSIL® XT 120 should not be exposed to high temperatures over longer periods of time.

Suitable catalysts beside tin derivatives include alkaline compounds, especially amines such as GENIOSIL® GF 9 (diamino silane) or DBU.

QR Code GENIOSIL® XT 120



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

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