

Silox®Injection 812nt

Low viscosity epoxy resin for injection

Silox®Injection 812nt is a special epoxy resin for consolidation of building materials with a small amount of binding agent and for crack and pore structure filling.

The material doesn't contain any solvents or blending products. Silox®Injection 812nt is a hard and tough material with excellent mechanical properties which hardens without shrinking.

The sum of the positive properties: extremely low viscosity, excellent penetration ability, long processing time and safe hardening, also in thin layers, and low temperature outplays normal epoxy resins.

reacts faster than Silox®Injection 810 nt

Silox[®]Injection 812nt: Silox[®]Injection 812nt is a typical product of our new product line NT, which means new technology which stands for: neither aggressive or irritant reactive thinners nor benzylalcohol.

> The allergenic potential is therefore very low. Silox®Injection 812nt is much more reactive than the standard product Silox®Injection 810nt.

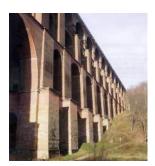
Application As 100% reactive liquid synthetic resin which is solvent free, Silox®Injection 812nt is suitable for all classic sealing jobs where normal epoxy resins are used for.

> Typical applications are strengthening of sandy concrete plates (industrial floors) or saturating impregnations. Silox®Injection 812nt is much more efficient because of the high (100%) solid content with a much better impact as normal resin with 20 -30 % solid content or with water diluted EP emulsions.

> Important: The product should not be used for film-forming coatings - e.g. for sealinas.

> The extreme low viscosity and the excellent spreading properties make Silox®Injection 812nt to a first class product for contact grouting in case of cavities below bonded screeds or tiles. The long potlife in combination with low viscosity enables working with low pressure or vacuum method which avoids damages caused by pressure build-up over the surface.

> Fine concrete cracks or damages in other building materials could be filled and sealed with Silox®Injection 812nt. The excellent wetting properties and low viscosity make the application easy. e. g. stipple injection



The material is perfectly suitable for structure reinforcement such as brittle building substance, as well as strengthening of building materials or mortars with a small amount of binding agent, brittle natural stone or damaged wood.

Saturation with Silox®Injection 812nt increases clearly the compressive strength and bending tensile strength. The original strength value of the treated parts will be regularly topped.

The adhesion of Silox®Injection 812nt on wet or damp mineral undergrounds is not perfect. We recommend Silox®Injection 811nt for such applications.



Properties

Type : Epoxyd-Liquid resin with Amine hardener Characteristic : Liquid, transparent, honey coloured Odour : Like Amine (hardener component)

MR Resin: Hardener : 5:1 (100:20) Weight

Viscosität : 80-90 mPa.s
Density (Mixed) : Approx. 1,05 gr/ml

Application time (t-Gel) : Approx. 30 minutes at 20°C

Stick free : Approx. 2 hours at 20°C (> 1 mm film thickness)

Hardening : Approx. 24 hours (in thin layers)

Adhesion on concrete : >4,0 kN/mm²

Processing

Silox®Injection 812nt is a typical epoxy resin. Both components must be mixed properly in the preset ratio 5:1. As a basic principle mixing should be done with mechanical mixing devices, just simple stirring is not sufficient. We recommend to repot the already mixed material and to stir once more before processing.

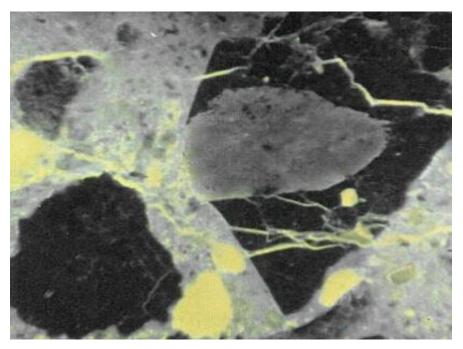


As all reaction resins is the hardening reaction exothermic. The self developed reaction heat results in a self acceleration of the resin which shortens the reaction time. This takes place when bigger quantities are mixed in one step. We recommend to prepare just the material which is necessary in the next step.

For processing are all commercial injection pumps suitable. There are no further requirements for the packers and the used materials of the injection pumps necessary. For cleaning we recommend the security solvent HydroSolv®520.

The known rules of technology for processing injection resins also apply to this product.

Silox®Injection 812nt: Creeps into micro cracks, finest pores and capillary structures





Safety Epoxy resins could irritate skin or cause allergenic reactions in case of sensitivity. The used polyamine and strong alkali in the hardener component are acidly to skin and mucosa. We recommend protective clothes and goggles and to keep the usual hygienic standards. The local law for the handling and application of epoxy resins are valid to this product.



In case of eye contact with the resin component or the ready mixture rinse immediately thoroughly for 15 minutes with water consult an eye specialist.

With Silox®Injection 812nt contaminated skin should be cleaned with water and soap and creamed with a lipid regulation cream.

Please pay attention to the safety datasheet.

Disposal

Storage Quality and reactivity are not affected by prolonged storage of Silox®Injection 810nt. During severe frost the components may solidify to wax-like masses. By careful heating (e.g. in a water bath, not above 50°C!) this change can be reversed without loss of quality.

> Silox®Injection 812nt contains no solvents, is not flammable, but combustible. This property must be observed during storage. The product must not be stored together with foodstuffs and must be kept in such a way that it is not accessible to children and unauthorised third parties.

> Liquid epoxy resins and their hardeners must be disposed of as hazardous waste according to most national regulations and in accordance with the relevant (locally different for such products) regulations. This also applies to empty containers with product adhesions. The reacted product is harmless and can be disposed of together with household waste or building rubble.

Recommended Auxiliary Materials

HydroSolv®520

Is a highly efficient security solvent for PUR and epoxy machines with a high flash point. Not toxic or harmful to health, no labeling or transport limits required.

HydroMoll®522

Efficient and cheap care and conservation material for PUR and epoxy machines. Suitable for machines and tubes. Stays inside until the next use and avoids sticking of material leftovers on valves and quad rings. No labeling required.

These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

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