

Silox®Injection 811nt

Low viscosity epoxy resin for injection

Silox®Injection 811nt 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 811nt is a hard and tough material with excellent mechanical properties which hardens without shrinking and an excellent adhesion on damp surfaces.

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.

Silox®Injection 811nt 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.

Application

As 100% reactive liquid plastic which is solvent free, Silox®Injection 811nt 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 811nt is much more efficient because of the high (100%) solid content with a much better impact as normal resin solutions or with water diluted EP emulsions.

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

The extreme low viscosity and the excellent creeping properties make Silox®Injection 811nt 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 which avoids damages to the coverings 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 811nt. 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 811nt 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 811nt on wet or damp mineral undergrounds is 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
	Viscosity	: 80-90 mPa.s, 20°C EN ISO 2884-1:2006
	Density (Mixed)	: Approx. 1,05 g/ml, 20°C DIN 53479
	Application time (t-Gel)	: Approx. 2 hours at 20°C
	Stick free	: Approx. 36 hours at 20°C
	Hardening	: Approx. 8 - 10 days (in thin layers)
	Adhesion on concrete	: >2,5 k/Nmm ² ASTM D 4541

Processing Silox[®]Injection 811nt 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 replot the already mixed material and to stir once more before processing.

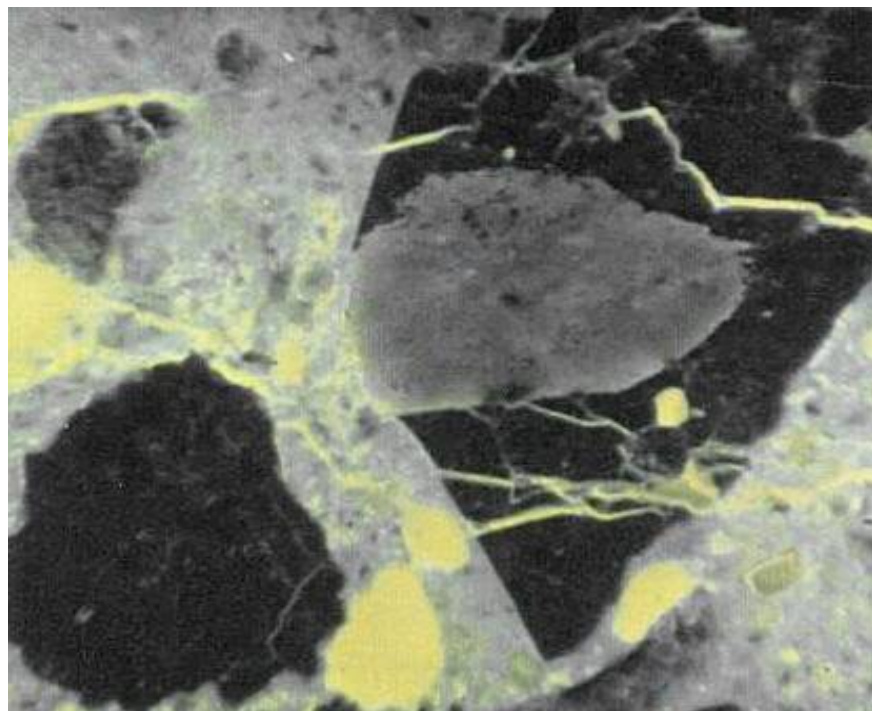


As all reaction resins is the hardening reaction exothermic. The self developed reaction heat results in a self acceleration of the resin which shortens the reaction time. This takes place when bigger quantities are mixed in one step. We recommend to prepare just the material which is necessary in the 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 811nt:
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 acidic 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 811nt contaminated skin should be cleaned with water and soap and creamed with a lipid regulation cream.

Please pay attention to the safety datasheet.

Storage Disposal Quality and reactivity are not affected by prolonged storage of Silox®Injection 811nt. During severe frost the components may solidify to wax-like masses. By careful heating in water bath (not more than 50°C) the material will be liquid again without any quality loss.

Silox®Injection 811nt 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 labelling 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 labelling 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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ARCAN Waterproof
ARCAN GmbH Spezialbaustoffe

Kleinniedesheimer Strasse 19
D-67240 Bobenheim-Roxheim
Phone: +49 (0)6239 - 99 78 20
Mail: office@arcan.biz
Web: www.arcan.biz

passion to invent 