

GEORESIN 350 is a structural low expansion 2 part high density PU polymer specifically designed to be used in the Ground Engineering civil sector, which - injected into voids beneath concrete slabs, pavements, foundations, walls, etc. - fills the voids, expands modestly and structurally supports structures to design strength. If injected into confined areas (in ground) below structures it will compact the ground and exert modest lift if confined.

GENERAL PROPERTIES AND APPLICATIONS

GEORESIN 350 is a polyol formulation which, mixed in the appropriate ratio with GEORESIN HARDENER, generates a structural void fill with a free rise density between 350 and 400 kg/m³, depending on the application method. In situ installed densities maybe as high as 500 kg/m³, confinement dependant. Injection as an in-ground structural resin is a process which compacts the base courses and strengthens support for the slabs or structures, with a minimum of disruption in time and inconvenience, a minimal loss of use and half the cost of replacement. Injecting GEORESIN 350 avoids fixing underlying problems with uneven or settling substrate with mortar soil stabilisation which is pumped at low pressure not capable of true soil compaction. It addresses the cause of the problem by high strength void filling, soil compaction and stabilisation, erosion control and precise slab lifting. GEORESIN 350 re-establishes contact between the slabs & structures and soil and is strong enough for heavy traffic or loads as of 0,2 h after the injection. GEORESIN 350 can be injected in muddy and wet undergrounds without losing its structural capabilities.

TECHNICAL DATA

GEORESIN 350		
Property	Unit	Value
Density at 20°C	kg/m³	1030
Viscosity at 20°C	mPa.s	204
Appearance		Clear yellow orange

GEORESIN HARDENER			
Property	Unit	Value	
Density at 20°C	kg /m³	1230	
Viscosity at 20°C	mPa.s	230	
Appearance		Black	

PROCESSING

GEORESIN 350 should only be used in combination with GEORESIN HARDENER, using a two-component volume pump and correct mixing ratio. The component temperature should not exceed 40°C.

DIRECTIONS FOR PROCESSING

Recommended mixing ratio	Volume	Weight
GEORESIN 350	100	103
GEORESIN HARDENER	100	123

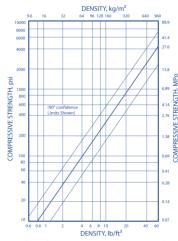
Manual foam test at 20°C	Volume ratio resin/hardener: 1/1
Start time	15 s
Gel time	25 s
Tack free time	30 s
Free rise density	350 kg/m³

These values are given only as a guide and must be verified in each individual case on finished parts manufactured under the processor's production conditions.

GEORESIN 350 is extremely resistant to all forms of chemical attack and the mechanical properties are not compromised by biodegradation or mechanical stress. The installed foam has zero environmental impact and is suitable for disposal by landfill.

GRAPHIC

Indicative values for similar systems - no specifications.



Effect of Density on Compressive Strength

PACKAGING

	GEORESIN 350	GEORESIN HARDENER
Drum	210 kg	250 kg
IBC	1045 kg	1250 kg

STORAGE

Storage temperature: 10 - 25°C recommended. Storage stability: <36 months for 90% or better reactivity. Longer storage times may result in slower reaction times, but not in reduced mechanical strengths or performance. Resin reaction times can be reduced by the addition of catalyst. The factory should be contacted for the correct formulation in this regard. Store the material in its original packaging to prevent moisture ingress in a dry well ventilated area not exposed to direct sunlight and in compliance with local safety requirements.

SAFETY AND HEALTH PRECAUTIONS

Before starting read the material safety data sheet carefully. To avoid extensive reaction or scorching, make sure that the component temperature does not go above 40°C and avoid filling large cavities in one application. High temperature formulation with slower reaction and low scorch is available on request. Protect your health! Working with this material, safety goggles, gloves and safety clothing should be worn at all times. While injecting, a full face shield is strongly recommended. Spills and blowouts do happen! Protect yourself and others on the jobsite. Consider covering property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children! Observe container labels, MSDS, and instructions in the Product catalogue before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area. Further protection: emergency showers and eyewash stations.