

generalities:	Bicomponent epo	,	oinder with	hardener of	amino	nature,	not
properties:	Low viscosity, medium/high vitreous transition, low thixotropy, pigmented, cures in presence of water.						
applications:	As impregnating binder for tissues, specific for pipes relining techniques, compatible with pipes very wet and with water. Formuleted for summer applications						
delivery- Kg:	component	A 8,400	B 1,600	A + B 10			
		16,800	3,200	20			

feature - test	reference norms	measure unit	value
Specific weight at 23 ± 2°C	ASTM D 792-66	Kg/dmc	about 1,35
Ponderal dry residuum	ASTM D 2697	%	100
Stoichiometric ratio in weight	ERL 13-70	A : B =	84 : 16
pot life (150 gr at 23 ±2°C)	ERL 13-70	minutes	about 60
Dust dry time at 23 ±2°C	ERL 13-70	hours	about 2,5
Curing time on film at 23 ±2°C	ERL 13-70	hours	about 5,5
Dust dry time in water at 23 ±2°C	ERL 13-70	hours	about 2,5
Curing time on film in water a 23 ±2°C	ERL 13-70	hours	about 6,5
Curing time in mass a 23±2°C (thickness 1cm)	ERL 13-70	minutes	about 180
Unitary breaking load for flexotraction*	ASTM D 790	MPa	> 75
Unitari breaking load for traction*	ASTM D 638	MPa	> 35
Elastic module for flexotraction*	ASTM D 790	GPa	>2,5
Max TG*	ASTM D 3418	°C	> 75

\*with 2 hours post cure at 80°C

The results of the tests are obtained in laboratory and are indicatives for the use of the material, but they are not to be considered as guarantee..

## **UNITEC 109**

## technical / application data sheet

mixing ratio	A:B = 84:16  Percentage ratio of hardener on base = 19,05%  The components A+B are delivered in pre-wheighted doses, ready for use
mixing	First mix separately the single components A and B and after mix together the components A+B until a perfect homogenizing is reached. Use Cowles mixers or similars.
use	On liners made of natural or synthetic fibers It is very important that the liners are dry.
application	For liners impregnation with pinch rollers or similars
temperatures of use	<ul> <li>Lowest +10°C: At lower temperatures the working with the product is more difficult for the increase of the viscosity.</li> <li>Highest +20/25°C: At higher temperatures the product may drastically lower the Pot Life times. It is therefore advisable to cool the mixture before the use</li> </ul>
storage	Store the well closed and original cans in dry warehouses at temperatures between +10°C and + 20°C.  When the resin is not completely used do not leave open the can of component B. By doing so the storage is nearly unlimited and the performances of the product remain inaltered for long time  High temperatures favour the deposit at the bottom of the cans. Do not apply the product before having well remixed the deposit  Low temperatures may cause the crystallization of the component A. The product can be brought back to the original liquidity without any inconvenient by applying to the product a moderate heating ( 40°/50°C ).
Cleaning of the tools	With solvent specific for epoxy systems
heigiene	It is important to handle the product by adopting the necessary precautions and by wearing suitable protectives garnments (see the safety sheets)
disposal	Do not dispose in the environment the empty pots and cans but dispose them in accordance to the national laws in force