

MULTIGEL 850

Duroseal – Acrylate Resin

Product Description	Acrylate resin with a versatile and adjustable reaction time for the waterproofing of building structures
Applications	Multigel 850 is used for a durable waterproofing of: <ul style="list-style-type: none"> • Construction joints with single or re-injectable injection hoses. • Cracks and voids in concrete against non-pressing water. • Structures by area sealing and grout curtain injections. • Leaking expansion joints
Properties/Advantages	<ul style="list-style-type: none"> • Adjustable reaction time between 8 and 50 minutes. • Addition safety due to swelling effect of up to approx. 75% by weight. • Flexible and solvent free acrylate resin. • Compatible with water. • Very good penetration • Injection resin belongs to the group of hydrogels

Technical and Chemical Data	Mixture of resin	
	Viscosity at 20° C (68° F) (mixture of components):	3-11 mPas
Density at 20° C (68° F):	Approx. 1.04 g/ml	
pH-value at 20° C (68° F):	9-10	
Color:	Yellow	
Solids content:	43%	
Chloride content:	<0.01%	
Processing:	Injection with one component or two component pumps/ Injection hose or packer	
Shelf life:	12 months	

Packaging (approximate yield = 10 US Gallons)	17.16 kg		Pallet size
	Resin	2 x 8.0 kg	30 x 17.16 kg = 514.80 kg
Accelerator	1 x 1.0 kg		
Hardener-Powder	4 x 40 g		
Accelerator, additional	4 kg	for fast reaction	

Storage	Multigel 850 shall be stored in closed containers at temperatures between 10° C and 30° C (50° F to 86° F) under dry conditions to avoid loss of reactivity. Protect from direct sunlight. All components have a shelf life of 12 months if storage recommendations are observed.
----------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

MULTIGEL 850

Duroseal – Acrylate Resin

Mixing Instructions for 20 kg mixed resin

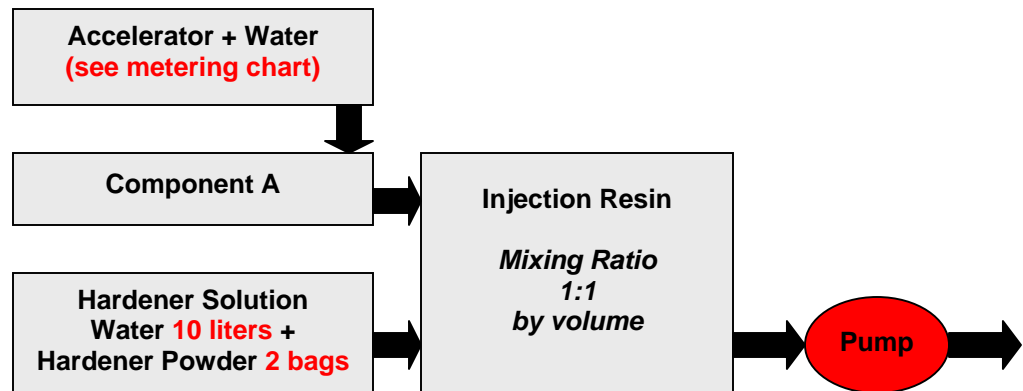


Figure 1: Mixing Instructions for processing in one-component pumps

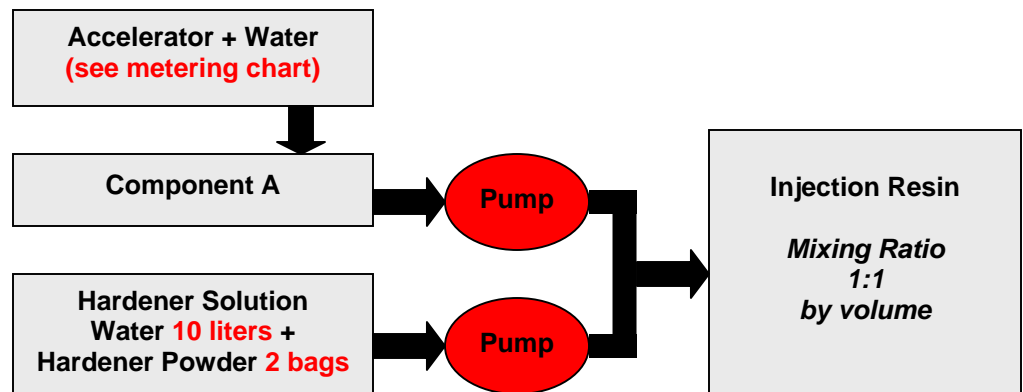


Figure 2: Mixing Instructions for quantities of minimum 10 kg

1. The contents of 2 bags of the hardener powder are dissolved in 10 liters of water in a separate container. The hardener solution is thoroughly stirred until the hardener powder is completely dissolved.
2. The necessary quantity of accelerator is selected from the enclosed metering chart, under consideration of the ambient processing temperature and the required reaction time. The chosen quantity of accelerator is diluted with water to a total quantity of 2 liters in a separate container. See metering chart.
3. The 2 liters of Accelerator solution are poured into one 8 kg canister of component A and thoroughly shaken/mixed.
4. The injection resin is activated in dependence of the injection pump used:
 - a) When using a one-component pump, partial amounts of the pre-mixed components are filled in a ratio of 1:1 into a mixing container and mechanically mixed.
 - b) When using a two-component pump, partial amounts of pre-mixed components are filled into the storage container of the pump. The pump is set to work at a ratio of 1:1 by volume.

Note for processing in one component pumps:

Workability time (pot life) =

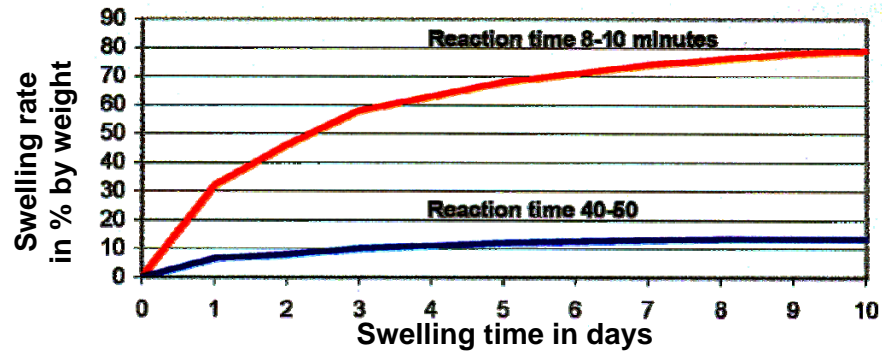
Reaction time (see metering chart) – (minus) 10 minutes

MULTIGEL 850

Duroseal – Acrylate Resin

Reaction Time	Metering chart:		Ambient Temperature					Quantity of accelerator per 8 kg component A, yield of 20 kg mixed resin (Total accelerator solution must be 2000 ml – see example)
	Accelerator In ml		5° C 41°F	10°C 50°F	20°C 68°F	30°C 86°F	40°C 104°F	
Fast Reaction Standard packaging plus additional accelerator	Reaction Time	8 min.			2000	980	380	
		10 min.			1150	480	240	
12 min.			1880	820	320	180		
15 min.		1800	1240	480	220	100		
20 min.		1060	900	280	140	60		
25 min.		820	480	200	80			
30 min.		620	350	160				
35 min.		440	280	120				
40 min.		360	250	80				
45 min.		320	220	78				
50 min.	250	200	74					
Slow Reaction Standard packaging	<p>Note for processing in one component pumps: Workability time (pot life) = Reaction time (see metering chart) – (minus) 10 minutes</p> <p>Mixing example Ambient Temperature 10°C (50°F) Required reaction time 25 minutes Accelerator = 480 ml Water = 1520 ml Total of Accelerator solution = 2000 ml</p>							
	<p>Storage life of activated hardener solution The hardener solution will keep its reactivity for approx. 24 hours. For a re-use at a later time, mixing of a fresh hardener solution will be necessary. We therefore recommend activating only the required quantities for immediate processing.</p>							
Injection/ Processing	<ul style="list-style-type: none"> Depending of the selected reaction time, Multigel 850 can be easily processed with one component or two component pumps. Multigel 850 is compatible with water therefore re-injectable injection hoses can be cleaned by vacuum. Multigel 850 will react in dependence of the accelerator quantity and the ambient temperature within approximately 8 to 50 minutes after mixing of component A with the hardener solution. The viscosity and the flow behavior of the material will stay almost unchanged over a long time. Approximately 10 minutes before the end of the reaction time a fast and clear increase in the viscosity of the material is seen. Tools and injection pumps can be cleaned with water after use. Hardened material can be removed with our cleaner DR 90. 							

Swelling Rate



Multigel 850 has a low to medium swelling rate and is therefore very suitable for an area sealing of structural members or for grout curtain injections. The swelling rate offers, however, additional safety, e.g. in case of joint movements. The determination of the swelling rate depends on the contact medium, the temperature and reaction time.

Safety Instructions

Multigel 850 does not contain poisonous ingredients. Acrylate monomers are irritating to the eyes and skin. Sensitizing in case of skin contact is possible. During processing the usual work hygienic protective measures shall be adhered to: do not eat, drink or smoke while handling the materials.

Personal protective measures: wear safety goggles, rubber gloves and work clothes. Provide for good ventilating at work. Further local work hygienic and person-related protective measures have to be considered.

Do not allow unmixed components to enter watercourses and soil. In cured state, **Multigel 850** is physiologically harmless.

General Information

All details, in particular the suggestions for the processing and use of our products are based on our present knowledge and experiences at the time of the printing.

Depending on the specific application, in particular regarding substrates, processing and environmental conditions the results may differ. BBZ AG and BBZ USA guarantees the compliance of the technical properties as described in the technical data sheets within the shelf life of the products.

Customers are advised to consult the latest technical data sheets, which are available on request.

Warranty

BBZ AG and BBZ USA warrant that the products manufactured by them shall be free from material defects. The obligation of BBZ AG and BBZ USA under this warranty, should any of the products prove defective, shall be limited to replacement of the defective product. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES, WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF.

Limitations of Liability: The manufacturer and BBZ USA in no event, whether claim is based on warranties, contract negligence or otherwise, are liable for incidental or consequential damages.



BBZ USA, Inc.

3400 Tree Court Industrial Blvd. St. Louis, MO 63122 USA
bbzusa.com • Tel: 800.325-9504 • Fax: 800.551-5145



GREENSTREAK GROUP, INC.
A Family of Construction Companies