

MONNELI BETOCRYL 60

Three Component Acrylic Injection Resin

Product Description

An elastic three component acrylic injection resin, especially designed for injection or re-injection hoses. The gel formation doesn't go suddenly as with other acrylic gels but the viscosity increases in linear way thus making it possible to control the re-injection process on the injection hoses.

BETOCRYL 60 has an excellent adhesion to the surface and the cured products swells in water.

Uses

BETOCRYL 60 is specifically developed for the following:

- Re-injection or injection hoses
- Curtain injections, etc.

Advantages

- Outstanding adhesion concrete, cements, bricks, etc.
- Penetrates deep into fine cracks
- Good chemical resistance (like petroleum, mineral, vegetable oils and greases, etc)
- Does not contain toxic solvents
- Non flammable
- Reaction speed can be adjusted from a few seconds to several minutes
- Excellent swelling properties
- High water retention capacity
- Provides superior adhesion to most substrates

Instructions for Use

Preparation

In order to obtain the acrylic gel of BETOCRYL 60 to work, the following steps should be followed;

Prepare **SOLUTION 1** by mixing 25 kg of Acrylic Resin (Part A) with 1.25 kg of Catalyst (Part B). Mixing ratio should be 20 Part A : 1 Part B by weight.

Prepare **SOLUTION 2** by diluting 60g Initiator (Part C) into 23.5 lit of water. Mix the above 2 solutions equally (1:1) by volume.

Setting Time	Version 1 (Catalyst + gel)	Version 2 (Catalyst + gel)
For 45-60 min	≤5 gm	≤10 gm
For 20-30 min	5-8 gm	10-17 gm
For 5-15 min	8-30 gm	17-40 gm
Less than 5 mins	>30 gm	>40 gm

All technical values are related to +20°C and 50% Relative Humidity.

All values are subject to 5-10 % tolerance

Inject the mixed product into the injection hose with a two component manual, electric or pneumatic pump. Ensure that the machine parts that come into contact with the resin must be in stainless steel.

For re-injecting injection hoses, rinse the injection hoses under low pressure with water within the reaction time.

The normal reaction time will be 10 minutes at 20°C. To increase the reaction time to 20 minutes, reduce the amount of Initiator (Part C) into half (30 g).

The reaction time decreases if the temperature is higher.

Cleaning

Clean the used tools with water immediately after completing the job

Recommendation

- Never use water that contains a lot of minerals in preparation of Solution 2. These minerals can accelerate the reaction time

Technical Data

Version 1

Properties	Results
Component A	
Appearance	Purple-pink liquid
Density	1.12 g/ml
pH	6.5 – 8
Component B	
Appearance	Clear yellow liquid
Density	1.11 g/ml
Component C	
Appearance	Powder
Mixed Product Properties	
Elongation	> 50%
Viscosity	< 50 cP
Corrosion behavior	nil
Sensitivity wet dry to cycle	No change in expansion ratio
Water tightness under pressure	$\geq 2 \times 10^5$ Pa
Compatibility with concrete	Passed
Sensitivity to wet dry cycles	No change in swelling capacity after 10 wet-dry cycles (Wet-Dry Cycle consists of drying at +50°C followed by 6 days of immersion in tap water at temperature of +20°C)
Application temperature	1°C to 40°C

All values are subject to 5-10 % tolerance

Version 2

Properties	Results
Color	White
Mixed density (A+B)	1.02 kg/dm ³
Mixed density (with water)	1.04 kg/dm ³
Viscosity (A+B)	15mPA.s
Viscosity (with water)	3mPA.s
Elongation	270%
Swelling ratio at water storage at 20°C	Approx 100%
Application time at 20°C at 10°C	2.5 to 10 minutes 3.75 to 40 minutes
Application temperature	+1°C to 40°C

All technical values are related to +20°C and 50% relative humidity.

All values are subject to 5-10 % tolerance

Applicable Standards

- DIN 53479
- DIN 52455
- DIN ISO 3219
- EN 12637
- EN 14498

Storage

Keep the product in dry and covered shed with a temperature between +5°C and +25°C. In these conditions the product will have a shelf life of 6 months from the date of manufacturing in the original unopened packaging.

Packaging

BETOCRYL 60 is supplied as a three component kit.

Version 1	Version 2
Component A: 25 kg	Component A: 23.8 kg
Component B: 1.25 kg	Component B: 1.19kg
Component C: 60g	Component C: 500g

Health & Safety

Wear gloves, goggles to avoid any contact with eyes and skin. In case of contact in the eyes and skin, wash abundantly with warm water and consult a doctor. Ensure adequate ventilation at working place.

Absorb spilled resin with sand and dispose according to the local regulations.

The information in this Technical Data Sheet is based on Colmef Monnelli's experience. Colmef Monnelli does not accept any liability arising from the use of its products as it has no direct or continuous control over where or how its products are applied. All Colmef Monnelli's Data Sheets are updated on regular basis. It is the user's responsibility to obtain the latest version.

DUBAI
ABU DHABI
ITALY

P.O. Box 123808 Dubai UAE
P.O. Box 127326 Abu Dhabi, UAE
Z.I. Ponte d'Assi 06024 Gubbio (PG)

T. +971 4 8803488 F. +971 4 8803450
T. +971 2 5511949 F. +971 2 5511749
T. +39 75 9221297 F. +39 75 9221174

colmef@colmef.ae

www.colmef-me.com

BETOCRYL 60
Technical Data Sheet
Edition: January 2020
Revision: 02