

CONCRESE[®] 1380

SCB Process (SCBP) injection resin improved standard

DESCRIPTION

CONCRESE 1380 is a two-component, solventless, low viscosity liquid adhesive for pressure injection grouting. **CONCRESE 1380** was developed specifically for use with the Structural Concrete Bonding Process (SCBP) and is available through certified applicators of this process.

FIELDS OF APPLICATION

- structurally rebonding cracked concrete sections
- filling porous or honeycombed layers
- anchoring bolts, dowels and reinforcing bars
- grouting areas prepacked with aggregate to form bearing supports

FEATURES AND BENEFITS

- excellent penetration of fine fissures
- high heat deflection temperature (HDT) providing increased resistance to creep and stress relaxation
- fast cure rate
- excellent adhesion even under adverse condition, such as combination of low temperature and moisture

TYPICAL PERFORMANCE DATA

Properties of cured material at 25°C

Tensile strength, N/mm ² (ASTM D638)	: 62
Tensile elongation, % (ASTM D638)	: 2.5
Flexural strength, N/mm ² (ASTM D790)	: 82.7
Flexural modulus, N/mm ² (ASTM D790)	: 4137
Compressive yield, N/mm ² (ASTM D790)	: 110
Compressive modulus, N/mm ² (ASTM D695)	: 1585
Compressive modulus, N/mm ² (ASTM D695)	: 57

Slant shear, AASHTO T-237):

Cure Condition	N/mm ²	Type of failure
at 25°C, 1 day, dry concrete	34.5	No failure
at 4°C, 3 days, wet concrete	20	80 % adhesive
at 4°C, 7 days, wet concrete	31	100 % concrete

PROPERTIES

Component	A	B	Mixed
Supply form	liquid	liquid	
Colour	Clear amber	black	black
Specific gravity @25°C, kg/m ³	1160	980	1100
Mixing ratio (by volume)	2	1	
(by weight)	100	44	
Viscosity, cps @4°C	7700	1200	4400
@25°C	640	190	350
@37°C	260	75	150

Application temperature range : 4 – 37°C

Pot life (60 g mass) in minutes : 25°C : 19
37°C : 8.5

Thin film (130µm) hours @25°C tack : 3 hours free

@25°C full cure: 3 days

@ 4°C full cure: 6 days

Gel time in wide cracks, @25°C :

(Tested between 50cm thick concrete blocks, approximately 30 x 30 cm)

Gap width, mm	Gel time, min
6	82
12	30
20	25
25	18

APPLICATION

Surface Preparation

For the SCB Process (SCBP) injection resins, the crackfaces inside the concrete are considered to be the "substrate". The substrate may be moist or even totally soaked with water, such as in water-filled cracks. Though the adhesion of the injection resin on water saturated substrates will still be sufficient, a slight decrease of the adhesion characteristics as compared to applications in dry concrete will occur.

Substances preventing the proper adhesion of the resin to the substrate, such as oil marine growth, etc., have to be removed using appropriate techniques such as ultra-high pressure water-jetting, flushing with detergents, etc.

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The Chemical Company

CONCRESlVE[®] 1380

Placing

The resin is mixed and installed, using the model 20-30N injection – equipment, which forms an integral part of the SCBP available through BASF Construction Chemicals approved applicators only.

PACKAGING

CONCRESlVE 1380 is available in units of 16.4 kg.

SHELF LIFE

CONCRESlVE 1380 can be stored in tightly sealed original packaging for 18 months at temperatures between 4 and 32°C. If these limits are exceeded the material shall be re-tested to confirm conformance with product specification.

PRECAUTIONS

This bulletin may not accompany the product when sold. For specific hazard warnings and first aid instructions, read the container warning labels carefully! Mixed components contain chemical compounds which may cause allergic-skin and respiratory reaction. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Use only with adequate ventilation. Wash thoroughly after handling. The use of hand barrier creams is recommended. Clean rubber gloves or disposable polyethylene gloves should always be worn. Should skin contact occur, wash immediately with soap and water.

For detailed Health, Safety and Environmental recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

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STATEMENT OF RESPONSIBILITY

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