



TECHNICAL DATA SHEET

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CONSOL GROUT 77 LP

Epoxy Resin Based Grout (Long Potlife)

DESCRIPTION

CONSOL GROUT 77 LP is a three part, solvent free, multi purpose epoxy resin based grout (long potlife). **CONSOL GROUT 77 LP** based on a combination of epoxy resins, selected fillers and aggregates that provides high strength.

RECOMMENDED FOR

CONSOL GROUT 77 LP is easy to apply for concrete, mortar, stone, asbestos cement, wood, polyester and epoxy:

- Structural bonding of anchors, starter bars, bars and tie bars
- Grouting of machine bases, base plates, bridge bearings, mechanical joints (road, bridge, etc) and bearing plates
- Tie-less rail grouting on bridges, crane rails, in tunnels.

BENEFITS

CONSOL GROUT 77 LP provides the following properties of benefit such as:

- Ready to mix, pre-batched units
- Solvent free
- High early strength
- Moisture tolerant
- No shrinkage
- High compressive strength
- Resistance to impact and vibration

PRODUCT DATA

Color/ Form

Part A : Clear liquid
Part B : Yellowish liquid
Part C : Grey homogenous powder
Mix (A+B+C) : Brownish Black

Packaging

Part A : 1.406 kg
Part B : 0.710 kg
Part C : 7.884 kg
10 kg set (A+B+C)

Density

Part A : 1.0 kg/l
Part B : 0.9 kg/l
Part C : 1.8 kg/l
Mix (A+B+C) : ~2.1 kg/l

Pot Life 30°C

45 minutes
(The potlife begins when the resin and hardener are mixed. The greater the quantity mixed, the shorter potlife)

Shelf Life

12 months when unopened

Storage

Dry, cool, shaded place

Product Temperature

< 30°C

Ambient Air Temperature

5°C - 30°C

Substrate Temperature

5°C - 30°C

TECHNICAL DATA

Chemical Base

Epoxy resin, selected fillers and aggregates, special additives

Tensile Strength in Flexure

28 days $\geq 70 \text{ kg/cm}^2$

Compressive Strength (*ASTM C-109*)

1 day	$\sim 30 \text{ N/mm}^2$
3 days	$\sim 40 \text{ N/mm}^2$
7 days	$\sim 45 \text{ N/mm}^2$
14 days	$\sim 50 \text{ N/mm}^2$



Bond Strength (On Steel)

14 days ~15 N/mm²

Bond Strength (On Concrete)

14 days ~3.0 N/mm²
Concrete failure

Handling Precautions

- Avoid contact with skin and eyes
- Wear protective gloves and eye protection during work
- If skin contact occurs, wash skin thoroughly
- If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.

INSTRUCTION FOR USE

Surface Treatment

Prepare surface area by cleaning. Remove oil, grease and other bond-inhibiting materials.

Concrete, stone, mortar:

Surfaces should be prepared by suitable mechanical preparation techniques such as high pressure water jetting, scabblers, blast cleaning, breakers, etc.

Steel:

Surface should be prepared thoroughly to an acceptable quality standard equivalent to SA 2.5 i.e. by blast cleaning and vacuum.

Grinding with coarse sandpaper is recommended method for epoxy and polyesters surfaces

Mixing Ratio

A : B : C = 1.406 : 0.710 : 7.884 (by weight)

Prior to mixing stir part A mechanically, when all part B has been added into part A, continuously mix using slow electric mixer (approx 300-400 rpm) until a uniform mix has been achieved. Pour mixture into suitable mixing vessel and add part C slowly and continuously. Stir for 3 minutes until a uniform mix has been achieved.

Application

Before the application, rest mix the mortar for a short time to allow entrained air to escape. Pour mortar into prepared opening (hopper) and maintain enough static pressure (15-20 cm). Ensure that entrapped air can easily escape. Use steel rods or chains to assist the flow of grout where necessary.

Cleaning of Tools

Clean all tools and application equipment with general cleaner after use. Hardened/cured material can only be mechanically removed.