

VARAGROUT - BLUE

NON-SHRINK FREE FLOW EPOXY GROUT

DESCRIPTION

VARAGROUT - BLUE is a 100% solids, three component free flow, non-shrink epoxy grout formulated to provide easy placement. It provides high strength and creep resistance combined with the highest effective bearing area.

USES

VARAGROUT - BLUE is a three component, pourable epoxy grouting compound for several applications. This highly developed material is often used to replace steel soleplates or rails and is used as an epoxy foundation capping material which is resistant to high operating temperatures. Its unique properties permit its use directly under highly stressed machinery mounting surfaces. Typical applications include grouting of diesel engines, compressors, generators, gears, pumps and most other heavy equipment. It is unexcelled under heavy reciprocating and rotary machinery due to its excellent resistance to creep, fatigue and shock forces.

ADVANTAGES

Dynamic load resistance due to high flexural, tensile and compressive strengths and excellent adhesion to concrete and metal surfaces. Rapid installation and strength gain leading to early commissioning. Excellent chemical resistance to most acids, alkalis, oils, petrol and water. Low creep characteristics under continuous loads. Excellent support for **VARAGROUT - BLACK**. Negligible shrinkage facilitates final alignment to be set before grouting.

TYPICAL PROPERTIES

- ◆ **Linear Shrinkage ASTM C 531:** 0.0001652 mm/mm.
- ◆ **Effective Bearing Area:** 95% minimum.
- ◆ **Creep, FSP creep:** 4.4×10^{-3} inches/inches at 180° F and 400 psi at 1 year.

- ◆ **Compressive strength: ASTM C-109,111** N/mm²- 7 days.
- ◆ **Tensile strength: ASTM D-638:** 25.6 N/mm²
- ◆ **Coefficient of Linear Thermal Expansion: ASTM D-696:** (24° to 70° C) : $32.5 \times 10^{-6}/^{\circ}\text{C}$.
- ◆ **Bond to concrete:** Concrete failure.
- ◆ **Barcol Hardness ASTM D - 2583:** 64
- ◆ **Pot Life:** 45 minutes @ 23°C.

FLOW

Flow is dependent upon gap width, grout head (100 - 300mm is normal) and temperature. At 20° C a 200mm head and average gap widths, the flow is in excess of 1 m.

LIMITATIONS

Do not apply in temperatures less than 5°C. Ensure that all surfaces are substantially dry. Ensure that the filler is added to the mixed base and hardener immediately after mixing to reduce the heat evolved.

APPLICATIONS

VARAGROUT - BLUE is normally used in thickness range of 25 to 38 mm (1" to 1 1/2"). For laying in thicker section. Please contact **AKARSH** Technical Dept.

Long pours should be divided into sections not exceeding 1.1 m (3' 6") in length. Longer, thicker or thinner pours are possible, but **AKARSH** Technical Dept. should be consulted before deciding upon them. The pourable viscosity of **VARAGROUT - BLUE** provides for essentially 100% surface contact. Because **VARAGROUT - BLUE** has negligible shrinkage, final alignment may be set before grouting.

For **VARAGROUT - BLUE** temperatures that will be between 49°C to 60°C (120° to 140° F) during engine operation the static loading shall not normally exceed 35kg/cm² (500 psi) which is practically possible for most machinery. Below 49°C (120° F) loadings upto 140 kg/cm² (2,000 psi) are permissible, but 85 kg/cm² (1,200 psi) should not be exceeded.

Precondition resin and hardener to 25° ± 2°C for 24hrs before mixing. The hardener should be added to the base resin and mixed for 1 to 2 min. Then add filler to this mix and mix again to 3-4 min. till the mix becomes homogeneous and free of any lumps. Use a slow speed drill (500 rpm) and fitted with a suitable paddle for mixing.

POST PLACEMENT PROCEDURE

Do not wet cure **VARAGROUT - BLUE**. It is a chemical curing material, All surfaces, equipment, and tools may be cleaned with lacquer thinner, ketones, or similar solvent before grout hardens.

In-service operation may begin immediately after minimum required grout strengths have been achieved. Final finishing of exposed surfaces is aided by applying a very light mist of solvent just before material becomes unworkable.

PACKAGING AND YIELD

VARAGROUT - BLUE: 21.6 kg Pack, Yield 9.8 litres.

PRECAUTIONS

- ◆ **Cleaning:** Spillages should be absorbed with sand or earth etc. and disposed in accordance with local regulations.
- ◆ **Storage:** Store in dry conditions upto 20° C. Shelf Life is 1 year.
- ◆ **Fire resistance:** The product is not flammable but will burn in a fire.

PERFORMANCES STANDARDS

The applicable specifications for performance and testing are:

ASTM C - 109
ASTM D - 638
ASTM C - 531
ASTM D - 2583.

HEALTH & SAFETY

VARAGROUT - BLUE should not come in contact with skin and eyes or be swallowed. Avoid prolonged inhalation of vapours. Some people are sensitive to epoxy resins, therefore, protective gloves, goggles and barrier cream should be used. Ensure adequate ventilation and if working in enclosed areas, suitable breathing apparatus must be used. If mixed resin comes in contact with skin, it must be removed before hardening with a resin removing cream, followed by washing with soap and water. Contamination of skin by non resin based products should be removed immediately with soap and water. Should accidental eye contamination occur with any of the above products, wash well with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately. Do not induce vomiting.