



## **NS Buildgrout-EP** (3K Epoxy based grout for Machine Base, Pile Caps, Column Base Plates)

*NS Buildgrout-EP is a three components, solvent free, high structural strength, void filling, non-shrink, flowable consistency, epoxy resin grout. It produces a volume stable structural grout where the mechanical properties, low permeability and chemical resistance of the hardened grout are of the highest order. It is designed for grouting of gap widths of 5-80 mm.*

**Usage:** NS Buildgrout-EP is used where non-shrink, high-strength, impermeable structural, durable grout is required such as precise machine bases, pile top encapsulation, pump and equipment bases, structural columns, horizontal voids, bedding, compressors, Fans or blowers, Motors, Generators, Machine bases of all types, Column base plates, etc.

**Advantages:** NS Buildgrout-EP is a professional choice, one step epoxy resin grout with controlled expansion properties, high structural strength, and contains no added chlorides, iron or gypsum. Will not rust, bleed or harm metal on contact.

### **Directions for use:**

**Surface Preparation:** The surface should be free from laitance, dust, oil and grease or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris etc. Concrete surface must be structurally sound clean & free from deteriorated concrete particles that could impair adhesion. Smooth substrates must be abraded to ensure proper bonding. Shim and anchor the support elements to prevent movement.

All surfaces must be substantially dry. All free standing water must be removed. Ensure that the form work is secure and watertight to prevent movement and leakage during the placing and curing of grout. The area should be free of excessive vibrations until the grout has hardened.

**Mixing:** The entire contents of the hardener should be poured into the base container and mixed until homogeneous. Place the mixed base and hardener into a suitable forced action mixer making sure that the entire volume is poured in. Add the aggregate and mix for 2-3 minutes or until uniform colour is achieved.

**Application:** Place the grout within the pot life of the material. After this time, unused material will have stiffened and should be discarded.

Continuous grout flow is essential. Sufficient grout must be available prior to starting and the time taken to pour a batch must be regulated to the time taken to prepare the next one.

Pouring should be from one side of the void to eliminate air entrapment. The hydrostatic head must be maintained at all times so that a continuous grout front is achieved.

### **Curing:**

Proper curing of the material is very important. Initial hardening takes place in 12 hours; and full curing takes 7 days for high strength structural bearing capacity.

### **Workability:**

Working time of BC Buildgrout-EP is 60 minutes at 25<sup>0</sup>C, after 5 minutes standing time

### **Standards:**

The cured material exhibits a minimum compressive strength of 80 N/mm<sup>2</sup>; a minimum flexural strength of 18 N/mm<sup>2</sup> and a minimum tensile strength of 14 N/mm<sup>2</sup> when tested after 7 days in accordance with BS 6319. The water penetration shall be Nil after 7 days, when tested in accordance with DIN 1048:Part 5: 1991.

### **Coverage:**

20 kg pack will yield approximately 16 liters, which is 0.0157 cubic meters. 70 bags of NS Buildgrout EP will yield approximately one cubic meter.

### **Typical Properties:**

Pot life	: 2 hrs @ 25 <sup>0</sup> C
Final Set	: 7 days @ 25 <sup>0</sup> C
Compressive Strength	: 80 N/mm <sup>2</sup> at 7 days
Flexural Strength	: 18 N/mm <sup>2</sup> at 7 days
Tensile Strength	: 14 N/nm <sup>2</sup> at 7 days
Water Penetration	: Nil at 7 days
Chloride Permeability	: Negligible

### **Composition:**

It is supplied as a three component system consisting of epoxy base, epoxy hardener and specially graded aggregate. The components are supplied in the correct mix proportions designed for whole pack mixing on site and no other materials should be added.



# BUILD PLUS

## CONSTRUCTION CHEMICALS

**Pack Size:** 20 kg (Hardener + Base + Aggregate)

### Technical support:

GMC offers comprehensive technical support service & specification assistance in locations to our channel partners, end users, and contractors.

### Quality & Care:

All the products manufactured and originated from Gulf Minerals and Chemicals, UAE facility are independently tested and certified under a Buildplus Management System to conform to the requirements of the quality, environmental, health & safety Standards.

### Shelf Life & Storage:

12 months if stored properly in original unopened packing in a cool, dry, and ventilated conditions away from direct sunlight.

### Handling:

NS Buildgrout-EP is a non- flammable and non-toxic in nature. Avoid contact with eyes and skin as it may cause irritation due to its alkaline nature. Splashes of Buildgrout EP should be washed off immediately with clean water. Wear necessary gloves and dust mas.

### Precautions:

- Do not add any admixture or fluidifiers
- Proper curing is required
- Do not use as a topping
- Do not use material at freezing temperatures
- Rate of strength gain is significantly affected at temperature extremes

### Health & Safety Precautions:

This product contains epoxy resin which is slightly alkaline. For people with sensitive skins may cause irritation. Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment. The use of barrier creams provides additional skin protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. In an emergency seek medical advice.

----- Buildgrout-EP -----

