Dynagrout® 65

Epoxy resin based 3-component free flowing high strength grout

The Construction Alchemists

Description

Dynagrout® 65 is a solvent free epoxy resin grout formulated for grouting of gap widths of 10 to 75 mm. It is supplied as a three part system consisting of base, hardener and specially graded fillers. It is supplied in the weighed packs to avoid site batching.

Features & Benefits

- Excellent durability - high compressive, flexural and tensile strengths ensure a long working life.
- Cost effective - high early strength gain promotes minimum downtime and early commissioning of plant.
- User friendly - simple, full pack mixing to ensure that the performance characteristics are achieved.
- Versatile - suitable for a wide range of loading situations including repetitive dynamic loads.
- Excellent in service performance - non-shrink capability ensures full surface to surface contact.

Primary Application

Provides a free flowing resin grout, for use where impact/dynamic loading , vibration and chemical attack of the hardened grout are expected. It is suitable for a wide range of heavy duty applications including :

- Crane rail tracks where clearance at operating temperature up to 60^{0}C at 60mm is prevent
- Base plate grouting in dynamic load situations such as turbines and other reciprocating machinery.
- Heavy industrial applications in steelworks, refineries chemical plants and electroplating works.
- Filling of visible voids in concrete structural members.

Technical properties

Pot life : 2hrs at 23^{0}C

Tensile strength : 14MPa at 7days

Flexural Strength : 26MPa at 7 days

Compressive strength

Age (days)	24 hrs	3 days	7 days
Minimum Compressive strength (MPa)	75	90	100

Maximum flow distance for a head of 100mm at 20^{0}C

35mm gap : 2000mm
70mm gap : 3500mm

Density : 2000kg/m^3

Co-efficient of thermal Expansion : 28.1 X 10^{-6}

Compressive creep : 2.50 X 10^{-3}mm/mm

Application instructions

Surface Preparation

All metal surfaces of equipment baseplate which are to be in contact with the grout should be throughly cleaned by sand blasting to ensure bonding with Dynagrout® 65

Underplate grouting

The unrestrained surface area of the grout must be kept to a minimum. Generally, the gap between the perimeter formwork and the plate edge should not exceed 75 mm on the pouring side and 25 mm on the opposite side. Formwork on the flank sides should be kept tight to the plate edge. Air pressure relief holes should be provided to allow venting of any isolated high spots.

Formwork

The formwork should be constructed to be leak proof as Dynagrout® is a free flow grout. This can be achieved by using foam rubber strip or mastic sealant beneath the constructed formwork and between joints. For free flow grout conditions, it is essential to provide a hydrostatic head of grout.

Foundation surface

This must be free from oil, 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. If shim plates are to be removed after grouting they should be covered with bond breaking materials to prevent grout from adhering. If shims wedges or blocks are to remain in place, they should have rounded corners, to avoid crack development and set back at least 50mm from any plate edge.

Base plate

Level and align the baseplate, according to the recommendation of the equipment manufacturer or to the specifications. A clearance between the baseplate and the found shall be maintained at a minimum of 50mm . For base plates wider than 900mm it is imperative to provide an additional 25mm clearance for each 900mm width. The grout thicker than 100mm is likely to be cracked due to excessive internal heat development and then cooling when larger thicknesses are to be done in stages not exceeding 50mm each.

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Mixing

Pour the hardener into the base container and stir by hand or a variable speed drill and paddle mixer, for 2 to 3 minutes, until the mixture is homogeneous. High speed mixing may entrain air which should be avoided. Transfer the mixed liquid to a clean and dry mortar mixer while it is rotating. Add thee filler slowly and mix until the filler is completely wetted. Over mixing may entrain air and reduce working time. Do not mix part units. Never add any solvents to adjust consistency of the mix.

Placing

Ensure that the grout can be placed within its pot life. 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.

Cleaning

All tools and equipment should be cleaned immediately after use with Talraksol GP.

Hot weather working

Whilst the performance of Dynagrout® 65 at elevated temperatures is assured, application under such conditions can sometimes be difficult. It is therefore suggested that, for temperatures above 35°C, the following guidelines are used:

1. Store unmixed materials in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.
2. Keep mixing and placing equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come into direct contact with the material itself.
3. Try to eliminate application in the middle of the day, and certainly avoid application in direct sunlight.
4. Ensure that there are sufficient operatives available to complete application within the material's pot life.

Limitations

Grouts should not be placed in any unrestrained situation, i.e. base plate plinths, etc. Failure to comply may lead to crack development in the grout.

Estimating
Packaging

Dynagrout® 65 is supplied in 8liter pack (base + hardener + filler)

Storage

Dynagrout® 65 has a shelf life of 12 months @ 35°C if kept in dry store in original, unopened containers. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

Precautions
Health & Safety instructions

Confined areas must be well ventilated and no naked flames allowed. Contact with the skin should be avoided as certain sensitive skins may be affected by contact with the polyester resin. In such cases if contact with the resin occurs, the skin should be washed immediately with soap and water-not solvent. Gloves and barrier creams should be used when handling these products. Eye contamination must be immediately washed with plenty of water and medical treatment sought.

Talrak Construction Chemicals Pvt. Ltd.

An ISO 9001:2015 Certified Company

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