POLYCOTE®

Technical Data Sheet
Easiflow CS Grout

Easiflow CS Grout

Rapid setting, non-shrink, high strength cementitious grout

Product Description

Easiflow CS Grout is a Portland cement based product giving high strength, good flow and non-shrink properties. Placed grout gives structural support and good vibration resistance.

Easiflow CS Grout's specialised mix design enables placement at low water content leading to good freeze-thaw stability, low water absorption plus resistance to oil, sea water and mild alkali attack.

Placement thickness may be in the nominal range of 10mm to 100mm.

Typical Uses

Crane rail tracks, stanchion bases, machine bed plates, dowel bars between pre-cast units, cable ducts, ground anchors.

Suitable substrates: *Easiflow CS Grout* is suitable for masonry, concrete, brickwork, stonework, rock, steel and iron.

Colour: *Easiflow CS Grout* is grey in colour.

Packaging: *Easiflow CS Grout* is pre-packed in 25kg units.

Physical Properties @ 20°C

Variation in Water Content

Mix water variation for particular applications will alter grout consistency and compressive strength as follows.

Water Addition	4.8L
Consistency	Liquid
1 Day	20N/mm²
3 Days	47N/mm²
7 Days	51N/mm²
28 Days	56N/mm²

Compressive Strength

Water addition 4.8 litres per 25kg of *Easiflow CS Grout*.

	Min	Max
1 Day	25N/mm²	35N/mm²
3 Days	40N/mm²	56N/mm²
7 Days	50N/mm²	65N/mm²
28 Days	60N/mm²	70N/mm²

Mechanical Properties

Flexural Strength:	10N/mm² @ 28 Days
Density:	2100 kg/m³
Modulus of Elasticity in Compression:	>20 GPa
Tensile adhesion strength:	>2.0 N/mm²
Reaction to Fire:	EuroClass A1
Freeze Thaw De-Icing Salt Resistance:	~3.2 N/mm²
Initial Set:	4.5hrs
Final Set:	5hrs

Direction For Use

Preparation

Formwork should be erected and made grout-tight. The formwork must be designed with sufficient hydrostatic head to ensure grout flow into and across the grouting area. Saturate the grouting area with water. Leave for 3-5 hours and then blow out any surplus water.

Mixing

Pour 4.8 litres of clean water into the mixing vessel for each complete bag of *Easiflow CS Grout* to be used. Slowly add the powder to the water whilst continually mixing.

Direction For Use (cont)

Mechanical mixing should be carried out using either a high torque slow speed drill with a Grout Stirrer or a grout mixer set on slow speed for at least 3 minutes. (High speed or colloidal mixing will cause thixotropy leading to loss of flow.) Allow the material to stand for 1–2 minutes before application to release any air entrapped during mixing.

Cleaning

Equipment should be cleaned with Solvent prior to grout hardening.

Application

Immediately after mixing, allow the product to de-gas for 1-2 minutes. Pour the grout from one side of the formwork using a header box or hopper, ensuring a continuous flow throughout the operation to prevent air entrapment. Keep the header box or hopper topped up during the entire application. Continue pouring until grout appears at the opposite side of the grouting area. Use steel banding or chains to help grout flow where necessary. Do not disturb the grout once placement is complete. For large-volume applications, the use of grout mixers and pumps is recommended.

Temperature in use

Easiflow CS Grout may be placed at temperatures between 5ºC and 35ºC. For placing at temperatures outside this range please contact the Polycote Technical Department.

Pot Life & Curing

The pot life is approximately 60 minutes.

Placed grout, which is exposed, should be cured in accordance with good concrete practice including water spray and spray applied curing membrane.

Yield

Each 25kg bag of *Easiflow CS Grout* will yield approximately 13.25 litres of mixed grout.

Each 25kg bag of *Easiflow CS Grout* plus 25kg of 6mm aggregate will yield approximately 22 litres of mixed material.

Cleaning

Equipment should be cleaned with Solvent prior to grout hardening. Once hardened/cured, material can only be removed by mechanical means.

Shelf Life & Storage

Polycote *Easiflow CS Grout* has a shelf life of up to 9 months in unopened bags when kept in dry conditions at a temperature between 5°C and 35°C.

Storage at higher temperatures or high humidity may reduce the shelf life.

Health & Safety

Before using this product, please ensure you have received and read carefully both the Hazard Label applied to the container and the relevant Material Safety Data Sheets.

Standards

Easiflow CS Grout has been tested in accordance with the appropriate parts of the following standards: EN 12390, BS 476, ASTM C953, ASTM C1107.

Easiflow CS Grout complies with the requirements of Corps of Engineers Specification for Non Shrink Grout CRD C621 and for Highways clause 2601.

Easiflow CS Grout complies with BS 6920 for water regulation WRAS (report no M103248).

Fire

Easiflow CS Grout is non-flammable.

Safety Factors

Easiflow CS Grout is alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice. For full health and safety data refer to the Materials Safety Data Sheet.

Any Questions

Please do not hesitate to contact us for advice regarding the use of this product or its suitability for your particular application.

Our aim is to provide all the technical help you need to make an informed choice and achieve total success.

Polycote Technical Helpline: **01234 846400**

All reasonable care has been taken in supplying the above information. However, any figures quoted do not constitute a specification but represent typical values obtained. It is the customer's responsibility to ensure the product is fit for the intended purpose and that conditions are suitable. Any technical advice is offered in good faith, but without warranty. This is also applicable when proprietary rights and third parties are involved. In the light of the Company's policy of continual research and development, it is the customer's responsibility to ensure that the information contained herein has not been superseded.