



Emckrete 'HP'

(Formerly Known as Master GroutPlus 65 GP)
Cementitious Shrinkage Compensated Grout

Product Properties

- Shrinkage compensated
- High early strength
- Chloride free
- Excellent flowability
- Adjustable consistency
- Impact resistant

Areas of Application

- Concrete repair
- Anchor grouting for rails and bolts
- Column or machine base plate installation
- Bridge bearing grouting

Application

Substrate Treatment

Surface to be grouted shall be cleaned and free from oil, dust and unsound material and contaminants. All absorbent surfaces such as formwork or prepacked aggregate shall be thoroughly wetted but free of surface water before grouting work commences.

For pressure grouting situation, check that formwork is properly constructed and sealed to prevent undesirable loss of grout pressure.

When pour section exceeds 75 mm in thickness, it is recommended that cleaned single size (minimum 10mm) aggregate be packed in the void to better distribute the hydration energy of the grout. In such a case, the weight ratio of aggregate to grout shall not exceed 2 : 1.

Mixing

Add 25 kg of Emckrete 'HP' to 4.5 – 4.8 litres of clean water, depending on the required flow consistency, in a mechanical mixer.

Mix materials for 2 to 3 minutes until grout homogeneity is attained and then lightly stir grout for several seconds to release trapped air before placing it immediately.

Placement and Curing

Once mixed, grout shall be placed within 25 minutes to maintain best flow characteristics.

For free pouring situations, pour sequence must be planned to ensure continuous unidirectional flow to prevent formation of trapped air pockets within the grout mass.

A minimum head of 150 mm is recommended for all free pour placement of grout. Use of breath holes and chains to assist grout flow is encouraged where necessary.

Curing

Once grout has attained final set, cure it immediately with the burlaps for at least 3 days.

Should there be direct sunlight exposure before final setting of grout, cover it with polyethylene sheet immediately after placement to prevent early loss of surface water.

Packing & Storage

Emckrete 'HP' is packed in 25 kg bag and has a shelf life of 6 months if kept in dry conditions.



Technical Data for Emckrete 'HP'			
Compressive Strength N/mm ²	age	trowel grade	flow grade
ASTM C942-91	1 day	40	30
	3 days	50	40
	7 days	60	55
	28 days	70	65
Restrained expansion (ASTM C940-87)	<u>age</u>		<u>expansion</u>
	3 days		0.10 %
	28 days		0.10 %
Flowability	flow spread BS cone	230 mm	
	flowability J-14 Funnel	50 seconds	
Mixing ratio (25 kg) Emckrete 'HP'	<u>consistency</u>	<u>water demand litre</u>	<u>ave. yield m³</u>
	trowel	3.8 to 4.0	0.0126
	pourable	4.2 to 4.4	0.0133
	flowable	4.5 to 4.8	0.0136
Application	anchor bolt	base plate/machine	pre-packed/pressure
		base	
Recommended consistency	trowel to pour	pour to flow	flow

Product Characteristics for Emckrete 'HP'	
Product	Cementitious Shrinkage Compensated Grout
Packaging	25 kg bag
Storage	Can be stored in dry conditions and original sealed packs, for a period of 6 months.
Disposal	Packs must be emptied completely

Safety Advice

Please take notice of the safety information and advice given on the packaging labels and safety information sheets.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees, which differ from the data contained in our information sheets, are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition: 09/2006/SIN. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.