

Kemgrout AID

A Plasticizing, Expansive Grout Admixture

Description	Kemgrout AID is a powder admixture for cement grouts and concrete, combining a plasticizing agent and a gas-producing expansion medium. The plasticizing agent allows the use of a low water/cement ratio with consequent strengths and durability. The expansion medium counteracts the natural settlement and plastic shrinkage of the cement mixtures and aids stability and cohesion. Sufficient restrained expansion is developed to ensure a high degree of interfacial contact. It complies with ASTM C827
Where to use	Kemgrout AID is used as an admixture for cement mixtures where a low water/cement ratio and positive expansion are required for applications including bed grouting, duct grouting non-shrink infilling, and jointing. Kemgrout AID used to: • Concrete, low water/cement ratio, and positive expansion • Cable-ducts in post-tensioning systems • Tunnel linings and bearing plates • Jointing of pre-cast units
Advantages	• The addition of Kemgrout AID can improve the compressive strength of cement-based grouts by approximately 12% when cured under restraint • The final setting time of cement grout is not significantly affected • Expansion characteristics an unrestrained positive expansion of 1- 4 % is typical in unset grouts in-cooperating Kemgrout AID to overcome plastic settlement when measured in accordance with ASTM C827 • Temperatures above 20 °C may slightly reduce this time • Increased flow performance with a low w/c ratio that facilitates placement or injection of grouts and mortars
Properties	
Type	Gray Powder
Density	1 ±0.1 Kg/lit
Chloride content	Nil
Expansion Time	20 - 120 minutes
Compressive Strength	Increased approximately by 12% Water reducing action, leads to obtain a higher compressive strength
Pressure to Restrain Plastic Expansion	Approximately 0.005 N /mm ²
Setting times	Didn't affect
Mixing	• For quantities up to 50 Kg a slow-speed drill fitted with a high-shear paddle is suitable • Larger quantities will require a high-shear vane mixer • It is essential that machine mixing capacity and lab availability is adequate to enable the grouting operation to be-carried out continuously • This may require the use of a holding tank with provision for gentle agitation to maintain fluidity • The selected water content should be-accurately pre-measured in the mixer • Slowly add the cement (and sand if required) • Mix continuously for 5 minutes to ensure a smooth even consistency is obtained

Application	• Areas to be-grouted should be prepared in the usual way to ensure clean sound, pre-wetted substrates • Place the grout within 20 minutes of mixing to gain the full benefit of the expansion process • Adopt usual placing of pumping procedures ensuring a continuous operation																		
Theoretical coverage	<table border="1"> <thead> <tr> <th>OPC Content(kg)</th><th>5mm sand Content(kg)</th><th>Water Content (L)</th><th>Kemgrout AID Content (Kg)</th><th>Approx. Yield (L)</th></tr> </thead> <tbody> <tr> <td>50</td><td>-</td><td>> 25</td><td>1</td><td>36</td></tr> <tr> <td>50</td><td>50</td><td>> 27</td><td>1</td><td>57</td></tr> </tbody> </table>	OPC Content(kg)	5mm sand Content(kg)	Water Content (L)	Kemgrout AID Content (Kg)	Approx. Yield (L)	50	-	> 25	1	36	50	50	> 27	1	57			
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	• Drastic overdosing of Kemgrout AID increases expansion and may cause frothing																		
Packaging	Kemgrout AID is supplied in packs each contains 1 Kg																		
Shelf life & Storage	Kemgrout AID has a shelf life of 12 months if kept in a dry store in its original packaging																		
Curing	On completion of the grouting operation, exposed areas which are not to be cut back should be thoroughly cured by means of water application, or Kemcure curing membrane or wet hessian																		
Cleaning	Kemgrout AID should be-removed from tools and equipment immediately after use with clean water																		
Compatibility	Kemgrout AID is compatible with high Alumina cement, Kemgrout AID may be-used in mixes containing certain other PROKEM admixtures																		
Health and Safety	• Kemgrout AID is non-toxic if comes in contact with skin • Use gloves to avoid contact with skins • If skin comes in contact, wash immediately with soap and water • Do not use solvents Eye contamination must be immediately washed with water, then seek medical treatment																		
Additional Information	PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction PROKEM reserves the right to change the properties of its products All orders are accepted subject to our current term of sale & delivery Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request PROKEM extends technical services to include after-sales support to assist users in the proper handling of our products																		