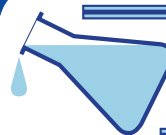


World Leaders in Foam Control



**BLACKBURN
CHEMICALS**
LIMITED

DISPELAIR®

DISPELAIR® PRODUCT RANGE FOR THE CONSTRUCTION INDUSTRY

Dispelair® Product Code	Type of Chemistry	Appearance
P 429	Based on alkyl glycols	Free flowing white powder
P 430	Based on alkyl glycols	Free flowing white powder
P 431	Based on alkyl glycols	Free flowing white powder
P 764	Blend of mineral hydrocarbons, surfactants and amorphous silica	Free flowing white powder
P 829	Blend of surfactants and amorphous silica	Free flowing white powder
CF 87	Based on mineral oil and surfactants	Opaque amber liquid
CF 707	Based on alkoxyane copolymers	Pale amber liquid

Further information on individual products, such as regulatory compliances and national inventory status, can be found on the Product Information Sheets.

PRODUCT SELECTOR GUIDE

Dispelair® Product Code	P 429	P 430	P 431	P 764	P 829	CF 87	CF 707
Anti-shrink Additive	●	●	●				
Low odour Anti-shrink Additive			●				
Anti-shrink Additive for High Humidity conditions	●						
General purpose liquid defoamer						●	●
Defoamer for Cements and Mortars				●	●		
Defoamer for Self Levelling compounds				●	●		
Defoamer for compounds containing Super plasticisers					●		

The above products are a selection from our range. If none of the above meet your requirements we are happy to recommend and/or develop a more suitable product.

For further information or samples please contact:

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World Leaders in Foam Control



Dispelaire® Foam Control Agents (FCAs) and Anti-shrink Additives

A range of Dispelaire® products are available (see tables) for incorporation into self-levelling floor screeds, concretes, cement based mortars, fillers and putties, textured compounds and plasters. FCAs are available in liquid form or as free flowing powders. Anti-shrink additives are supplied as free flowing powders.

The main requirements of a FCA or Anti-shrink Additive are as follows:

1. The FCA / additive must be incorporated easily and remain active for the shelf life of the construction compound.
2. The FCA / additive must be stable in alkaline conditions.
3. The FCA must prevent entrapment of air bubbles during mixing with water and on application, which, on drying, would lead to strength reduction or surface defects in the construction compound.
4. The anti-shrink additive must control the loss of water during drying, but not retard cement hardening.
5. The FCA / additive must not affect the rheological and mechanical properties of the construction compound.

Typical addition levels are 0.1 – 1.0% for FCA and 0.5 – 1.0% for anti-shrink additive. Optimum levels for a particular construction compound should be determined by trial.

Our development team at Blackburn can help to recommend the correct Dispelaire® product and indicate suitable addition levels by testing in our laboratory. Evaluations can be tailored to meet the particular requirements of a customer, but the following tests give a good indication of the performance of Dispelaire® products in a construction compound.

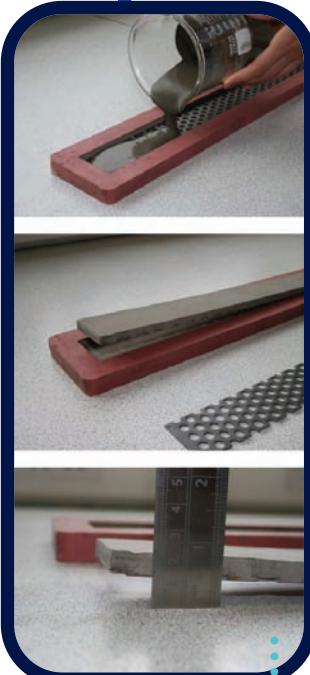


Flow Test

Efficiency & Flow effect

The efficiency of FCA is measured using an air entrainment test. This gives an indication of the ability of the FCA to prevent aeration during mixing and application.

Water is incorporated into a construction compound using a slow speed mixer. The specific gravity (S.G.) of the final mix is measured. By comparing mixes with and without added FCA the efficiency of the FCA is determined.



Hindered Shrink Test

The effect on flow characteristics is determined by filling 3 small cylinders on a Perspex sheet with the construction compound. The cylinders are lifted at timed intervals and the mix is allowed to drain out, forming discs on the sheet. The final diameter of the dried discs is measured to determine the flow characteristics over time. Mixes with and without FCA are compared to determine the effect of the FCA on flow.

Hindered Shrink Test

A rubber mould is used to cast a screed or mortar. The mould is lined with a thin steel strip with holes. The screed fills the holes of the strip which prevents shrinkage on one face of the solid screed when it is setting. Shrinkage on setting can only therefore occur on one face of the screed, resulting in bending of the set screed bar.

The amount of curvature of the bar can be used to calculate shrinkage in (mm/m)

Workability

A wet mix is poured into a tray divided into 2 and checked for complete flow into the corners. At timed intervals extra mix is added to the first then second half to determine if it flows and levels out, or leaves a mound. After a further time the divider is removed and the mix is checked to see if it flows together to fill any gaps.