Technical Leaflet

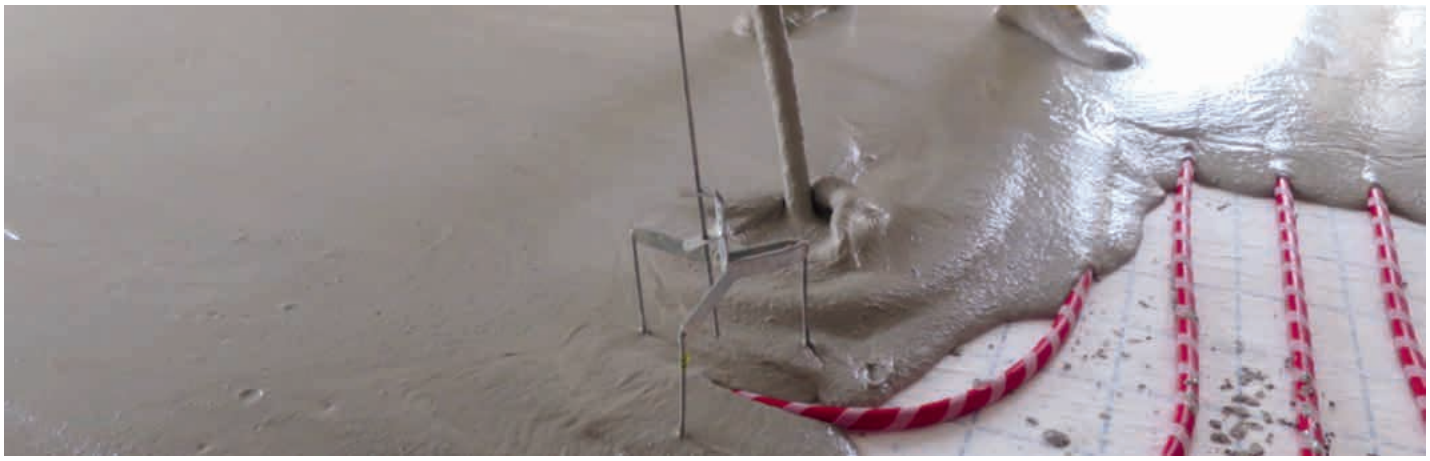
Melflux® 1022 F

PCE based superplasticizer in powder form for calcium sulphate based flowing floor screeds

BASF
We create chemistry

What is Melflux® 1022 F?

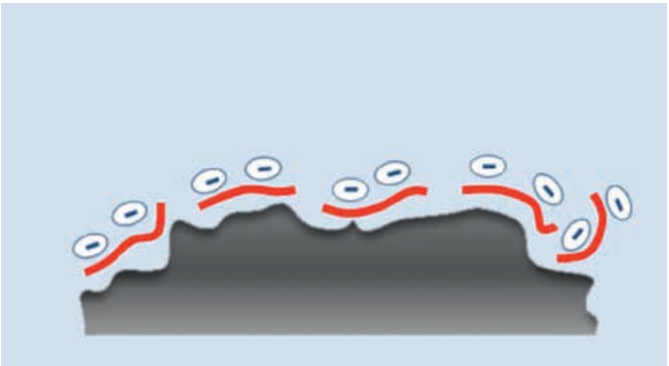
Melflux® is the brand name of BASF Construction Solutions GmbH for its specialty superplasticizers based on polycarboxylate ethers (PCE). Melflux® 1022 F is a highly efficient superplasticizer with excellent fluidification and water reduction properties developed especially for calcium sulphate based flowing floor screeds. Melflux® 1022 F is very low in VOC (volatile organic components) and therefore useful to formulate calcium sulphate based flowing floor screeds according to EMICODE EC 1 (very low VOC emission standard).



Polymer and product technology

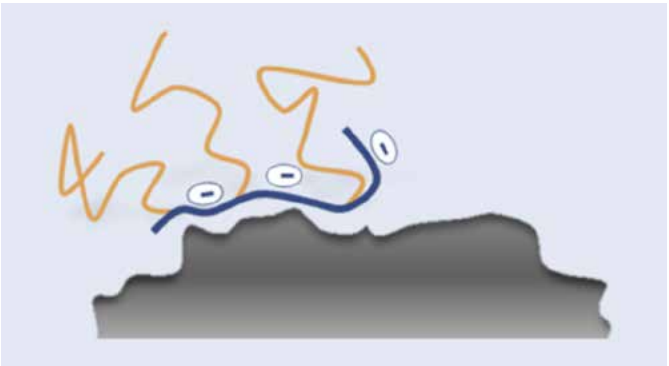
Melflux® 1022 F consists of a backbone with carboxylate groups and side chains. The backbone with anionic carboxylate groups is responsible for the adsorption of Melflux® 1022 F on the surface of calcium sulphate particles. The side chains help to disperse the agglomerated particles which fluidifies the mix and improves workability (slump keeping capacity) of the calcium sulphate based flowing floor screed.

Traditional technology
Melamines (MFS)



- electrostatic attraction
- high adsorption degree
- strong surface covering

Melflux® 1022 F technology
Polycarboxylate ether (PCE)



- electro-steric attraction
- low adsorption degree
- weak surface covering

Technical Recommendations

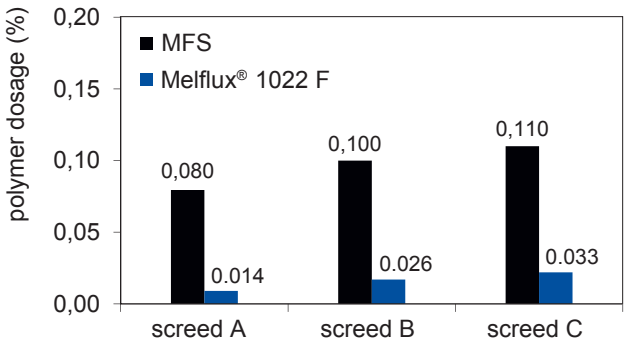
- Dosage recommendation: 0.01 to 0.05 % (by weight of dry mortar).

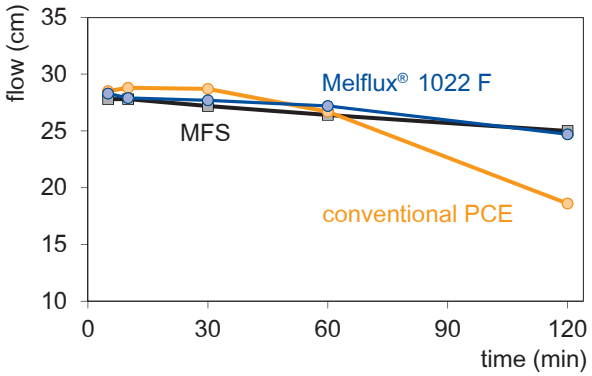
What features and benefits can be achieved?

Features	Benefits
➜ Very dosage efficient	➜ Constant flow values over a long time
➜ Low impact on strength development	➜ Robust concerning overwatering
➜ No defoaming necessary	➜ Good early and final strength development
➜ Very low VOC emission	➜ Useful for EMICODE® EC 1 standard

Dosage efficient and long workability over time

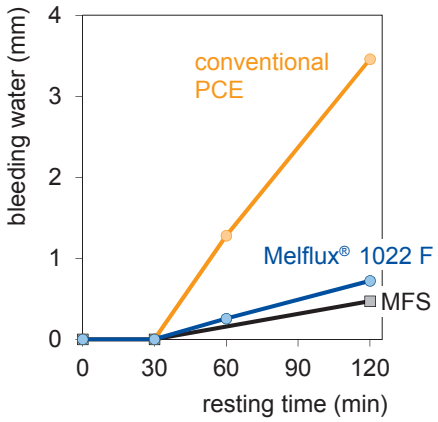
Melflux® 1022 F is up to 6 times more dosage efficient (depending on screed formulation) as conventional superplasticizers based on sulphonated melamine polycondensate products (MFS). Due to the molecular structure, Melflux® 1022 F provides a very long workability time compared to conventional PCE superplasticizers.

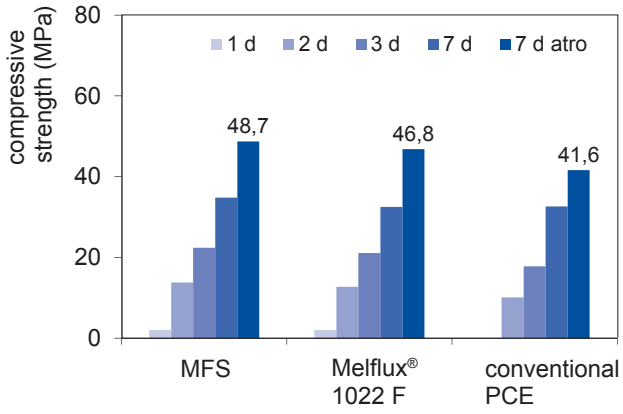




Robust against water fluctuation and good strength development

Melflux® 1022 F provides a sufficient robustness against bleeding and a good development of early and final strength.
(7 d atro = dried after 7 d at 40 °C to mass consistency before testing)





Further information (test formulations and further test results) is available on demand. Please feel free to contact our local sales representatives.

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