

Melment® F

Superplasticizers in powder form for cementitious and calcium sulphate based dry-mix mortars

What is Melment® F?

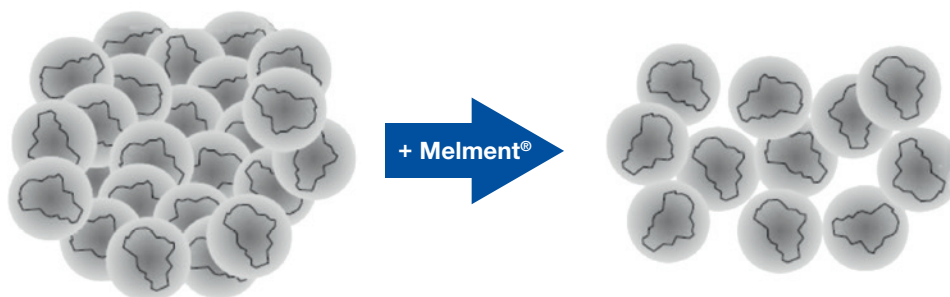
Melment® F is the brand name of BASF Construction Additives GmbH for its superplasticizers in powder form based on sulphonated melamine polycondensation products.

Melment® has a strong adsorbing and dispersing effect on mineral binder particles (such as cement or calcium sulphate particles) because of the high negative charge density of the synthetic polymer. However **Melment®** has no negative impact on the surface tension of the mixing water.



Mode of action of Melment® superplasticizer molecules

Anionic **Melment®** polymers adsorb to the surface of the cement (resp. calcium sulphate) particles and disperse the agglomerated particles which fluidifies the mix and improves workability of the mortar.



Melment® F in dry-mix mortar systems

The different grades of **Melment® F** are customized to various kinds of different applications and requirements (for cementitious and gypsum-based dry mortar systems).

| Features | Benefits |
|---|---|
| ▶ Strong dispersing and fluidifying effect | ▶ Optimal consistency and applicability |
| ▶ High water reduction | ▶ Improved strength and abrasion resistance |
| ▶ No air entrainment | ▶ High density, high durability, no surface defects |
| ▶ No discoloration | ▶ Homogeneous surface aspect |
| ▶ Excellent cohesion of fresh mortar | ▶ No bleeding, no segregation |
| ▶ Outstanding compatibility with all cementitious or calcium sulphate based binders and all common mortar additives | ▶ Utmost scope for the formulator and greatest formulation alternatives |

Fields of application of Melment® F grades

| Cementitious applications | Calcium sulphate based applications |
|---------------------------------------|--|
| ▶ Self-levelling underlayments (SLUs) | ▶ SLUs based on alpha-hemihydrate (α -HH) |
| ▶ Floor screeds and industrial floors | ▶ Flowing floor screeds based on anhydrite or α -HH |
| ▶ Non-shrink grouts | ▶ Moulding and industrial plaster |
| ▶ Repair mortars | ▶ Medical and dental plaster |
| ▶ Tile adhesives and tile grouts | |

The different Melment® F grades

The **Melment® F** portfolio comprises grades for cementitious applications (e.g. **Melment® F 10**) and grades for gypsum-based applications (e.g. **Melment® F 10 G**).

| Melment® F grades for cementitious applications | | Melment® F grades for gypsum-based applications | |
|---|-------------------------------------|---|--|
| Product | Properties | Product | Properties |
| Melment® F 10 | Allround product | Melment® F 10 G | Allround product |
| Melment® F 10 M | Enhanced dispersing effect | Melment® F 15 G | Long open time, low formaldehyde content |
| Melment® F 15 | Low formaldehyde content | Melment® F 17 G | Lower formaldehyde content |
| Melment® F 50 | Very low content of sodium sulphate | | |
| Melment® F 4000 | Enhanced dispersing effect | | |
| Melment® F 245 | Strongest dispersing effect | | |

▶ **Dosage recommendation: 0.20 – 2.00 % (by weight of cement resp. calcium sulphate)**

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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