

Castament® FS 20

Characteristics / Chemistry

Castament® FS 20 is a free flowing, spray dried powder of a polymerisation product based on polyethylene glycol.

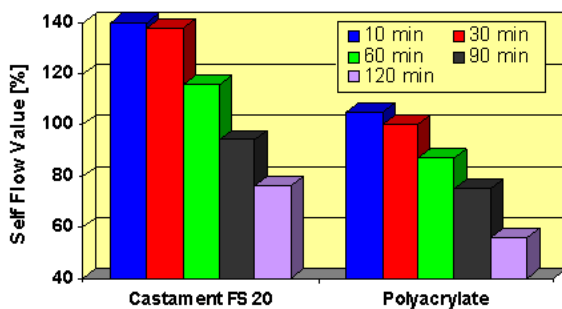
Fields of Application

Castament® FS 20 is a polymeric dispersant for improved refractory use. It is recommended for **microsilica and CAC (calcium aluminate cement) containing LCC or ULCC castables**. It can not be recommended for MCC.

Selected Test Results

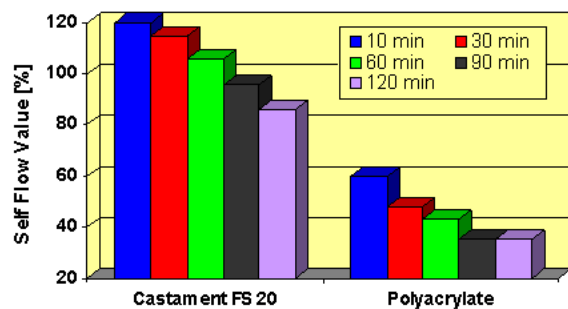
Tests have been carried out using **Castament® FS 20** dispersant and a common polyacrylate as a reference. It is either possible to enhance workability properties of the refractory material or to reduce the water content of the mix in order to get better physical and hardened properties of the formulation.

Test Results Formulation 1



Cement (70% Al ₂ O ₃)	0.5%
Al(OH) ₃	0.5%
White Fused Alumina	84%
Calcined Al ₂ O ₃	7%
Microsilica 983 U	8%
Dispersant	0.05%
Water	4.1% b.w.c.

Test Results Formulation 2



Cement (70% Al ₂ O ₃)	0.75%
Fused Silica	84%
Microsilica 983 U	16%
Dispersant	0.05%
Water	6.5% b.w.c.

Technical Data

Physical shape	powder
Appearance	characteristic, light brown to dark brown
Drying loss, [%]	max. 4.0
Bulk density, [kg/m³]	300 to 600
pH-value (20 °C), 20 % solution	3.0 to 5.0
Dosage recommendation, [%] in relation to weight of refractory material	0.05 to 0.50
Packaging	15 kg paper bags
Storage	to be stored in its unopened original packaging, store dry below 40 °C and protect from excessive heat; no double stacking of pallets , may cake when exposed to pressure and friction
Shelf life	1 year
Storage class	11 (flammable solids)
Transport regulation	not known as a dangerous good according to transport regulations

Castament® FS 20 is a dispersant based on latest polymer technology. Due to the nature of radical polymerization and the composition, it is known that this technical product has some natural colour variations from nearly colourless to yellowish up to slightly brownish. However, these colour variations have no influence on the application performance of the product. It is not known that the product colour changes significantly over time under normal storage conditions.

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This technical note is valid until replaced by a new issue.