Lamberti

Esacol®

Formulation guidelines by Lamberti

Guar Gum base water retentive agents for cement, gypsum and lime

Our Guar Gum derivatives offer the widest range of performances required by cement, gypsum and lime base products.

They act as essential additives to enhance the chemical and mechanical characteristics of dry mixes during the full cycle of their life.

Esacol® can be effectively used in mortars & plasters, cement tile adhesives, self-levelling floorings, thermal insulation systems, skim coats, plasterboard and coloured renderings to achieve the high level of technical demands required by the building industry, such as:

- Water retention
- Shear thinning effect
- Wetting capability
- Open time
- Adhesive tensile strength
- Correction time
- Curing time for accelerated products

All these characteristics as well as the high renewable content present in the backbone of the natural polymer derivative make this technology one of the most attractive and future-oriented specialty for the construction industry.

Esacol® Rheological modifiers & Water Retentive Agents

PRODUCT	CHEMICAL	APPEARANCE	BROOKFIELD VISCOSITY / MAIN SPEC.	FEATURES & BENEFITS
ESACOL 50 M/B	Chemically modified polysaccharide	Whitish flowing powder	21000 - 26000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Enhanced anti slip effect in T type CTA formulations
ESACOL 55 M/U	Chemically modified polysaccharide	Whitish flowing powder	23000 - 28000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Open time enhancer with high water retention capability
ESACOL 50D1	Hydrophobically modified polysaccharide	Yellowish flowing powder	1000 - 2200 mPa*s (1% w/w solution, 20°C, 20 rpm)	High water retention capability with excellent workability
ESACOL HM 22	Hydrophobically modified polysaccharide	Yellowish flowing powder	min 4500 mPa*s (1% w/w water sol., 20°C, 20 rpm)	High thickening power with pseudoplastic behaviour
ESACOL HD 15	Chemically modified polysaccharide	Yellowish flowing powder	12000 - 14000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Thickening effect with lumps-free mixing
ESACOL HS 20	Chemically modified polysaccharide	Yellowish flowing powder	8000 - 11000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Multi-purpose water retentive agent & rheology modifier
ESACOL HS 24	Chemically modified polysaccharide	Yellowish flowing powder	6000 - 10000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Multi-purpose rheology modifier. It can be used in combination with all additives
ESACOL HS 26 S	Chemically modified polysaccharide	Yellowish flowing powder	6000 - 11000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Multi-purpose rheology modifier. It can be used in combination with all additives
ESACOL HS 30	Chemically modified polysaccharide	Yellowish flowing powder	6000 - 10000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Multi-purpose rheology modifier. It can be used in combination with all additives
ESACOL HS 30 R	Chemically modified polysaccharide with delayed solubility	Yellowish flowing powder	6000 - 10000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Multi-purpose rheology modifier. It can be used in combination with all additives
ESACOL MX 110	Chemically modified polysaccharide	Yellowish flowing powder	6000 - 8000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Multi-purpose water retentive agent & rheology modifier
ESACOL MX 444	Chemically modified polysaccharide	Yellowish flowing powder	8000 - 12000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Multi purpose additive for drymix systems gypsum and cement base. Good anti-sagging property
ESACOL MX 155	Chemically modified polysaccharide	whitish flowing powder	6000 - 8000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Anti settling agent with excellent suspending power at very low dosage
ESACOL HSL 30	Chemically modified polysaccharide	Yellowish flowing powder	≤ 1000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Stabilizer for low viscosity liquid mortars with water retention capability
ESACOL MX 195	Chemically modified polysaccharide	Yellowish flowing powder	9000 - 13000 mPa*s (2% w/w solution, 20°C, 20 rpm)	Highly performing additive for plasters and adhesives
ESACOL 506/E	Low molecular weight chemically modified polysaccharide	Yellowish flowing powder	10000 - 20000 mPa*s (10% w/w solution, 20°C, 20 rpm)	Enhances water repellency of boards allowing reductions of siloxanes dosage

	GYPSUM							CEMENT					CEMENT					PASTE & LIQUID SYSTEM									
PRODUCT	plaster & levelling compounds	skim coat	joints filler	joint compound	adhesive	self-levelling	plasterboard	plaster	skim coat	tile adhesive	grout	self-levelling overlay	self-levelling screed	thermal insulation system	bricks mortar	Water Proof Systems	Concrete	coloured rendering	skim coat	joint compound	siloxane and silicate paste	paste putty	paste adhesive	waterproof elasto-meric membrane	primer	anticarbonation	top coat surface
ESACOL 50 M/B		●			●				●	●				●													
ESACOL 55 M/U	●	●	●	●	●				●	●	○			●					●	●							
ESACOL 50D1	○	●	○					●	●	○				○		●											
ESACOL HM 22		●																	●			●	●	○			
ESACOL HD 15		●	●	●															●	●							
ESACOL HS 20	●	●	●	●	○			○	●	○	○			○	●		●										
ESACOL HS 24	○	○	○					●	●	●	●			○	●		●										
ESACOL HS 26 S	●	●	●		○			●	●	●	○			○	○		●										
ESACOL HS 30	○	○	○					●	●	●	●	○	○	○	○		●										
ESACOL HS 30 R	○	○	○					●	●	●	●	○	○	○	○		●	●			●	○	○	●			
ESACOL MX 110	●	●	●		○			○	●	○	○			○	●		●										
ESACOL MX 444	●	○						●	○																		
ESACOL MX 155	○					●		○			●	●	●	○													
ESACOL HSL 30						●					●	●												●			
ESACOL MX 195	●	○						●	○	●																	
ESACOL 506/E							●									●											