

Betol[®] H 35

Powder formulated hardener for soluble silicate based binders

Chemical description

Betol H 35 is an inorganic, powder formulated hardener based on modified aluminosilicate, developed to be used in low ratio (SiO₂ to Alkalioxide) soluble silicate based systems.

Mode of action

Through thermal and alkaline activation, Betol H 35 performs the hardening of alkali silicate based systems. Due to an increasing ratio and due to the integration of released multivalent metal ions into the generated silicate network, temperature resistant and water-insoluble compounds can be achieved.

Specification (average values)

Powder Density:	approx. 0,4 g/cm ³	059*)
pH (1 % in water):	not applicable	008*)
Solubility in H ₂ O:	insoluble	
Appearance:	grey powder, fine	

*) Internal method code – description available on request

Properties

- Good hardening properties in combination with low ratio soluble silicates,
- resulting compounds with high water and water vapour resistance (after thermal activation),
- inorganic product,
- eco-compatible,
- VOC-free,
- non-toxic.

Application

Betol H 35 is used as a hardener for low ratio soluble silicate based formulations, e.g. for the production of insulation boards, moulded parts, bricks, artificial stones, fire protection systems, ...
Mixtures of 2 to 5 parts alkali silicate in combination with 1 part of Betol H 35 show advantageous properties.

Note

The hardening requires at least 80°C and will preferably take place at 200°C for approx. 10-20 minutes. Thereby, maximum water resistance can be achieved.

Storage

Betol H 35 has to be protected from humidity. Storage stability in closed receptacles under dry conditions at least 6 months. Open receptacles should be used up soon.

Labelling / Safety

Not subject to classification according to EC Guidelines and German Ordinance on Hazardous Materials (GefStoffV).

Packaging

15 kg bags

03/2017