

ANTIGEL® KF ANTIGEL® KF-D



Multifunctional additives

Properties

- Avoid viscosity increase by air oxidation
- Avoid skinning
- Regeneration of thickened batches
- Avoidance of floating and flooding
- Improvement of gloss and flow
- Reduction of dispersing time
- Avoidance of sedimentation
- Free of labelling

ANTIGEL® KF / ANTIGEL® KF-D – Mode of Action

- **ANTIGEL® KF / ANTIGEL® KF-D** are compatible for almost all common coating systems, solvent borne as well as water-based.
- **ANTIGEL® KF / ANTIGEL® KF-D** contain a special newly developed anti-skinning additive. Due to the combination of special active ingredients they have special high anti-skinning activities.
- **ANTIGEL® KF / ANTIGEL® KF-D** help to optimise through-drying of the paint film without increasing the drying process significantly.
- **ANTIGEL® KF / ANTIGEL® KF-D** do not leave the coating like Meko. Because of special selected mechanism which influences only reactions initiated by oxygen, other chemical reactions during hardening are not affected. Also drying of oxidative hardening coating systems is not influenced.
- **ANTIGEL® KF / ANTIGEL® KF-D** contain a highly effective wetting and dispersing additive particularly for inorganic but also organic pigments which improves dispersing time, floating and flooding and avoids sedimentation.
- **ANTIGEL® KF / ANTIGEL® KF-D** improve gloss and flow due to an optimum adjusted levelling additive.

ANTIGEL® KF / ANTIGEL® KF-D are free of ketoximes and aromatics. Therefore, they are completely harmless concerning toxicology. They are free of labelling according to EEC classification.

Skinning

Skin formation occurs in coating systems, which are crosslinked oxidatively by the exposure of aerial oxygen and thus form a polymer film. Aerial oxygen is diluted in the coating and reacts with the binder. This reaction produces a premature undesirable crosslink on the surface of the coating also called skin formation.

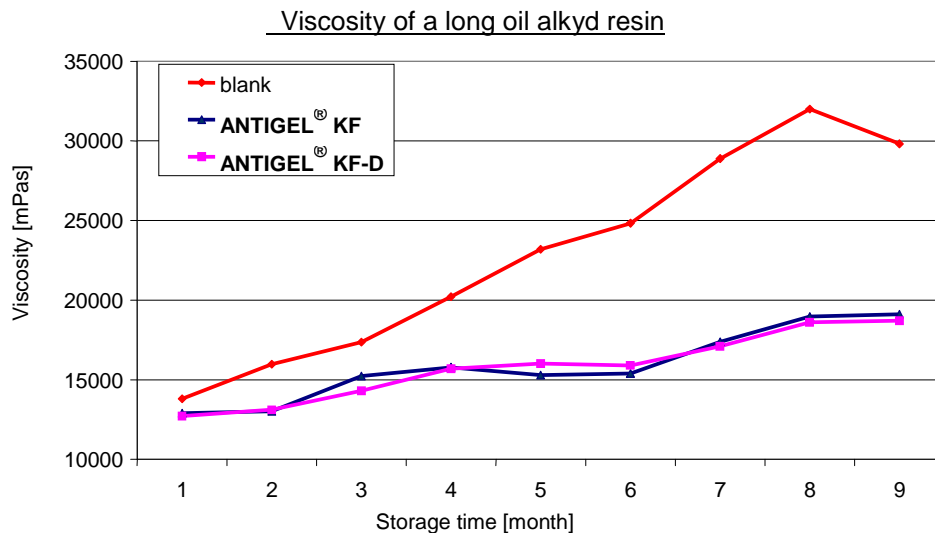
In order to avoid the formation of skin **ANTIGEL® KF / ANTIGEL® KF-D** are used. They interfere in the oxidation process and prevent the reaction of oxygen with the resin molecules.



The above information is based on our current knowledge and experience. No binding assurance in respect of certain properties or suitability for certain applications must be read into our information. Patent rights and other proprietary rights must be observed if necessary. Further safety instructions please learn from our material safety data sheet. 01/2015

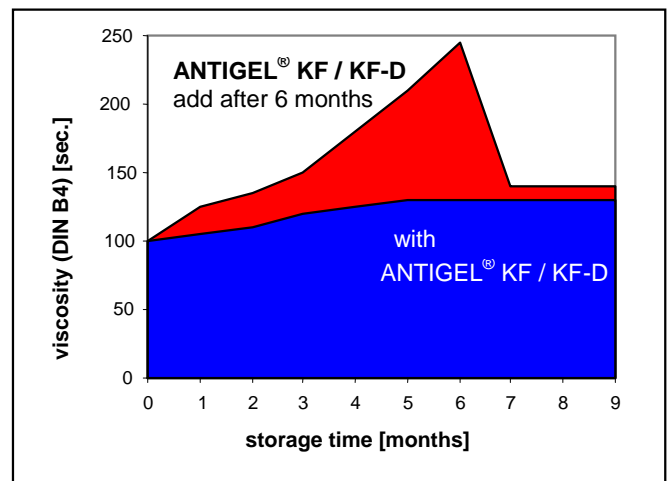
Viscosity stabilisation

ANTIGEL® KF / ANTIGEL® KF-D stabilise the viscosity of ambient and oven drying varnishes during storage.



Regeneration of thickened batches

ANTIGEL® KF / ANTIGEL® KF-D can be used to regenerate thickened batches as post additive. As one of the main fields of application, dip-coatings are recommended.



Avoidance of floating and flooding

ANTIGEL® KF / ANTIGEL® KF-D are highly effective dispersing additives particularly for inorganic and also for organic pigments. They prevent floating and flooding effects and the so-called Bénard cells by wetting the pigments effectively. Reduction of dispersion time and minimisation of agglomerates are the result of wetting improvement as well as controlled flocculation.

Gloss improvement

ANTIGEL® KF / ANTIGEL® KF-D contain a compound that increases the flow property of the binder. Gloss degree, tinting strength and water resistance are improved.

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Gloss with **ANTIGEL® KF / ANTIGEL® KF-D**



without **ANTIGEL® KF / ANTIGEL® KF-D**



Suitable resin systems

Solvent-borne systems

- Alkyds
- Alkyd/melamine
- Alkydpolyesters
- Polyesters
- Acrylates
- Nitrocellulose combination
- Polyurethanes
- Epoxides
- Acid curing systems

Water-based system

- Alkyds
- Alkyd/acrylic
- Alkyd/melamine
- Alkydpolyesters
- Polyesters
- Acrylates
- Thermoplastic acrylates
- Reactive acrylates
- Polyurethanes
- Epoxides
- Acid curing systems

Typical application fields

- General industrial coatings
- Architectural paints
- Automotive refinishing paints
- Can coatings
- Coil coatings
- Corrosion inhibitive paints
- Decorative paints
- Marine paints
- Wood coatings
- Printing inks
- Adhesives

Dosage

ANTIGEL® KF / KF-D is recommended for anti-skinning purposes with a dosage of 0.1 – 0.5 % on total formulation.

ANTIGEL® KF-D / KF-D is also suitable as multifunctional additive, which can be used in a dosage 0.1 - 15.0% on solids depending on the field of application. For regeneration of thickened batches an amount of 5.0 % can be applied, while at least 2.5 % (up to 15.0 %) will be needed as dispersing additive.

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