

ANTI-TERRA-204

Controlled flocculating wetting and dispersing additive for solvent-borne medium-polar to non-polar thick layer systems and primers to prevent fillers and inorganic pigments from settling and to gel bentonites.

Product Data

Composition

Solution of a polycarboxylic acid salt of polyamine amides

Percentage of renewable
raw materials: 46 %

Typical Properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Amine value:	37 mg KOH/g
Acid value:	41 mg KOH/g
Density (68 °F):	7.76 lbs/US gal
Non-volatile matter (20 min., 302 °F):	52 %
Solvents:	Methoxypropanol/Alkylbenzenes 3/2
Flash point:	88 °F

Food Contact Legal Status

For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

Applications

Coatings Industry

Special Features and Benefits

The additive acts by controlled flocculating the pigments. This also prevents sagging and keeps the pigments from settling as well as flooding and floating. ANTI-TERRA-204 is also suitable for non-polar systems (white spirit compatible), in contrast to ANTI-TERRA-203. The lower the polarity, the stronger the thixotropic effect will be. Long, middle, and short oil alkyds, PVC copolymers, chlorinated rubber and epoxies are the preferred binders. It can often improve anticorrosive properties when used in protective coating primers.

Recommended Use

Especially recommended applications: Industrial coatings, wood and furniture coatings, protective coatings.
Recommended application: Architectural coatings.

Recommended Levels

Amount of additive (as supplied) based upon pigment:

Inorganic pigments: 1-2 %
Titanium dioxide/Fillers: 0.5-1 %
Bentonites: 30-50 %

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

Incorporation and Processing Instructions

For optimum performance, the additive must be incorporated into the millbase before addition of pigments. It is also suitable for retroactive batch correction, however, for this application the performance is somewhat lower.

The following suggested formulation can be used to gel bentonites:

85-87 parts (by weight) solvents
10 parts (by weight) bentonites
5-3 parts (by weight) additive

The solvent can be aromatic or aromatic white spirit, although aromatic-free white spirit is also suitable. If the gelling effect is not sufficient, polar solvents may be added to increase it.

Special Note

Discolorations may occur in coatings based on cellulose nitrate, chlorinated rubber, and PVC copolymers. Silicate coatings have a shortened pot life. High levels may affect pot life and curing in epoxy systems. The additive's high amine value can lead to increased viscosity in the epoxy resin.

SMC, BMC, Pultrusion

Special Features and Benefits

The additive derives its benefits from the systematic, controlled flocculation of fillers, which primarily prevents the fillers from settling.

Recommended Use

Especially recommended applications: Pultrusion. In this application, the additive is functional in all resin systems, including UP, VE, acrylic and epoxy.

Recommended Levels

0.5-1.5 % additive (as supplied) based upon fillers.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

Incorporation and Processing Instructions

For optimal performance, the additive should be incorporated before solids are added.

Ambient Curing Systems

Special Features and Benefits

The additive derives its benefits from the systematic, controlled flocculation of fillers and chips, which primarily prevents these particles from settling. This allows ANTI-TERRA-204 to facilitate a more homogeneous distribution of fillers and chips in acrylic systems. The additive prevents settling, which achieves a more even surface structure when using chips.

Recommended Use

Especially recommended for acrylic systems (PMMA in MMA).

Recommended Levels

0.5-1.5 % additive (as supplied) based upon fillers.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

Incorporation and Processing Instructions

For optimal performance, the additive should be incorporated before solids are added.

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