AQUACER 581

Wax emulsion based on a carnauba wax to improve the surface characteristics of aqueous seed coatings and for use as an anti-caking additive for the underwater granulation of thermoplastic synthetic materials.

Product Data

Composition
Non-ionic emulsion of a carnauba wax

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

Non-volatile matter:	30 %
Carrier:	Water
Melting point (wax content):	185 °F
Viscosity (73 °F, D=400/s):	< 50 mPa·s
pH value:	7.5

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.

Storage and Transportation
Temperature sensitive. To be stored and transported between 5 °C (41 °F) and 35 °C (95 °F). Mix well before use.

Applications

Thermoplastics

Special Features and Benefits
Thermoplastic granulates (TPE, TPU, EVA) have a tendency to stick together ("cake") under pressure and heat. AQUACER 581 is used for the underwater granulation of such materials; it forms a protective coating around the granules to create non-sticky and free-flowing granulates. In contrast to the frequent practice of dusting the granulates with solid release agents (chalk, talcum), much lower quantities of AQUACER 581 are required so that the properties of the thermoplastics are not affected. This method also prevents the formation of dust during processing. If foam develops in the circulation water during underwater granulation, we recommend using BYK-023 (silicone defoamer) or BYK-016 (silicone-free defoamer) at a dose of 0.05-0.1 %.

Recommended Levels
0.2-5 % additive (as supplied) in the circulation water.

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

Incorporation and Processing Instructions
The additive is added directly into the circulation water.

Seed Coatings

Special Features and Benefits
AQUACER 581 optimizes the wetting of the seed, increases the surface slip of the coating and therefore has an anti-blocking effect. The seed is therefore free-flowing and plantability is improved. The formation of dust is reduced due to the high abrasion resistance.

Recommended Use
The wax emulsion is recommended for aqueous seed coatings. It is used as an additive in systems with polymer binders and can also replace such binders as a film former.

Recommended Levels
10-30 % (as supplied) based on the total formulation when used in polymer binders.

70-90 % (as supplied) based on the total formulation when used as a substitute polymer binder.

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

Incorporation and Processing Instructions
The wax additive is preferably added at a low shear rate. Mix well before use.

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