

HORDAMER PE 03

Primary polyethylene dispersion for formulating release agents for metal die casting and for improving the surface characteristics of aqueous printing inks and inkjet inks.

Product data

Composition

Non-ionic/anionic primary dispersion based on polyethylene

Typical properties

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

Density (20 °C):	0.98 g/cm ³
pH value (20 °C):	9
Non-volatile matter (60 min, 125 °C):	40 %
Carrier:	water
Melting point (wax content):	95 °C
Viscosity (20 °C):	< 50 mPa·s

Storage and transportation

Product shelf life in unopened original packaging: 15 months

Temperature sensitive. To be stored and transported between 5 °C and 35 °C. Stir before use.

Applications

Lubricants and mold release

Special features and benefits

HORDAMER PE 03 is recommended for formulating aqueous mold release agents which are used in aluminum die casting. The product brings about a good wetting of the mold at high temperatures, very good film forming and outstanding adhesion to the mold surface. The mold is protected from damage and the finished molded components have an excellent surface quality. HORDAMER PE 03 also remains stable in hard water.

Recommended levels

10-70 % additive PE 03 (as supplied) based on the total formulation.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

HORDAMER PE 03 is preferably diluted with water, but can also be mixed directly with all the components of the aqueous mold release agent.

Printing inks

Special features and benefits

HORDAMER PE 03 is recommended for aqueous printing inks, for improving the scratch resistance, abrasion resistance and tape release.

Recommended levels

1-5 % additive (as supplied) based on the total formulation.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

The additive is preferably incorporated at the end of the production process with a low shear rate. The product must be stirred thoroughly before use.

Inkjet inks

Special features and benefits

HORDAMER PE 03 is recommended for aqueous inkjet inks, for improving the scratch and abrasion resistance.

Recommended levels

1-5 % additive (as supplied) based on the total formulation.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

The additive is preferably incorporated at the end of the production process with a low shear rate. The product must be stirred thoroughly before use.

Adhesives and sealants

Special features and benefits

Hot-melt adhesives

HORDAMER PE 03 is used as an anti-caking additive in the manufacture of hot-melt adhesives during underwater pelletizing so as to obtain free-flowing and non-sticking granulated material. It is directly added to the cooling water and, therefore, is easy to handle and dust-free. HORDAMER PE 03 is especially recommended for hard water in this application.

Packaging adhesives

HORDAMER PE 03 improves the adhesive properties of aqueous emulsion adhesives intended for packaging. In the bonding of film laminated surfaces using paper or cardboard, HORDAMER PE 03 improves adhesion on the side facing the film. Adhesion is particularly enhanced on films made of oriented polypropylene (OPP), bi-axially oriented PP (BOPP) and, in some cases, also polyethylene (PE). The product has good adhesion properties also at low temperatures. HORDAMER PE 03 prevents yellowing when storing bonded systems at higher temperatures. HORDAMER PE 03 is a part of the binder in these applications, which is why it is added in greater quantities.

Recommended levels**Hot-melt adhesives**

0.5–5 % additive (as supplied) based upon the amount of water in the cooling circuit.

Packaging adhesives

10–50 % additive (as supplied) based upon total formulation.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions**Hot-melt adhesives**

The additive is added directly to the circuit water. If foaming occurs in the circuit water, we recommend the use of defoamers at a dosage of 0.05–0.3 %.

Packaging adhesives

The additive should be added after admixture of the binder.



Your local
contact

BYK-Chemie GmbH

Abelstraße 45
46483 Wesel
Germany
Tel +49 281 670-0
info@byk.com
www.byk.com



Download
our app:
byk.com/app

ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK-AQUAGEL®, BYK-DYNWET®, BYK-MAX®, BYK-SILCLEAN®, BYKANOL®, BYKCARE®, BYKETOL®, BYKJET®, BYKONITE®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, NANOBYK®, OPTIBENT®, OPTIGEL®, PURABYK®, RECYCLOBYK®, RHEOBYK®, SCONA®, SILBYK®, TIXOGEL® and VISCOBYK® are registered trademarks of the BYK group.

The information contained herein is based on our current knowledge and experience. No warranties, guarantees and/or assurances of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. Any information about suitability, use or application of the products is non-binding and does not constitute a commitment regarding the products' properties, use or application. Contractual terms and conditions, in particular agreed product specifications, always take precedence. We recommend that you test our products in preliminary trials to determine their suitability for your intended purpose prior to use. We reserve the right to make any changes and to update the information herein without notice.