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TECHNICAL DATA SHEET

BILTREAT KC 306

(Economical Surface Sizing Agent for kraft, liner, test liner)

Description:

BILTREAT KC 306 is designed specifically to meet the requirement in sizing promotion for medium &
liner paper. Although, Starch is widely used in surface sizing and it does not improve surface strength
& ring crush, but it has nothing to do with sizing performance, So an additional sizing agent must be
added to the starch system either to get a higher sizing affect or to further reduce sizing agent in the
wet end.

Physical Properties:

Chemical Description	Styrene Acrylic Copolymer
Appearance	Milky white to creamish emulsion
Ionic Character	Cationic
Total Solids %	30 ± 1
pH at 25°C	3.0 – 4.0
Viscosity at 25°C - cps	<50

Advantages:

- No need to adjust pH of the size press solution.
- Effective on acid and neutral base Kraft paper.
- Can be combined with anionic, weakly cationic and nonionic auxiliaries.
- Sizing is stable to alkaline liquids.
- Low viscosity, easy to handle.
- No unpleasant odor.
- BILTREAT KC 306 does not impact wet strength to the kraft paper.
- Low foaming of the size press solution

Surface Sizing with BILTREAT KC 306 offers the following advantages over Internal Sizing:

- Improves the toner adhesion.
- Improvement in ink jet printability.
- Reduces dusting and picking.
- Produces stronger kraft e.g. higher bursting strength and tensile strength.
- Level of sizing can be corrected faster.
- No deposit on kraft machine felts, screens and white water.

Applications:

- Surface sizing in the size press, film press or similar units.
- It can be added in batches or continuously, the latter method being more versatile in that it enables levels of addition to be adjusted more quickly as circumstances demand.









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Technical Notes on Applications:

Mode of Action

- Application of BILTREAT KC 306 in the size press changes the wet ability of the kraft paper and reduces its water absorption. The presence of aluminum ions in the base kraft is not necessary for obtaining optimum results.
- The normal drying temperatures on the kraft machine are sufficient to develop full sizing. No additional curing period is required.
- BILTREAT KC 306 has good stability in the presence of large quantities of electrolytes.

Pre-Sizing of base Kraft Paper

- Normally the more absorbent the base kraft paper in the size press, the better is the results achieved with BILTREAT KC 306.
- Excessive pre-sizing in the stock can impair the performance of BILTREAT KC 306 by inhibiting penetration into the sheet.
- The normal fillers can be added to the base kraft. Very good results are obtained with calcium carbonate fillers.

Amount Required:

• The amount of BILTREAT KC 306 required depends on a number of factor such as the composition of the furnish absorbency of the base kraft paper and the degree of sizing required. Experience has shown that 0.5 – 2.0 kg/ton of craft is generally sufficient.

Temperature:

• BILTREAT KC 306 remains stable in the size press solution. The size press solution should be below 80°C (160°F) before adding BILTREAT KC 306.

Type of Starch:

- BILTREAT KC 306 is generally applied at the size press with a starch solution. A medium to low viscosity
 nonionic, anionic or cationic starch is normally used. Since the type of starch can affect sizing to
 some extent, the efficiency of BILTREAT KC 306 in combination with the starch should be tested
 before use.
- BILTREAT KC 306 can also be applied without starch i.e. simply diluted with water.

Recommended Dosage:

• BILTREAT KC 306 can be added batch-wise to the starch solution storage tank as well as continuously in the operating tank or the feeding pipe to the size press. BILTREAT KC 306 is low foaming, so defoamers are normally not required.

Packing:

• BILTREAT KC 306 is supplied in 200 liter/ 1000 liter drums.









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Shelf Life:

• For further information consult the Material safety data sheet (MSDS) and label.

<u>Disclaimer:</u> The suggestion & data in this publication is currently believed to be accurate. We do not guarantee its accuracy as the conditions & methods of the use of our products are beyond our control. Purchasers should always make their own determination of its suitability and completeness for a particular use, for the protection of the environment & for the health and safety of employees.