

BEISOL HTN

Chemical Character

Heat-stabilized bacterial amylase for starch size decomposition

Bacterial amylase

Appearance Yellow - brown liquid

Ionic Character -

pH Value 6.5 – 7.5

Stabilities The efficiency of BEISOL HTN is very much impaired by the presence

of heavy metals and their salts, oxidation agents, reduction agents, alkalis and strong acids. Anionic surfactants can also impair the effect.

The product is sensitive to frost to a certain extent. Changes occurring at low temperatures disappear after warming up and stirring well.

Storage The product is to be stored properly in a cool place without direct

exposure to sunlight. We recommend not to exceed a storage time of

12 months.

Properties

BEISOL HTN is an enzymatic product which decomposes starch not only at temperatures normally used for desizing processes (65 - 70 °C) but also at boiling temperature. Due to this heat stability the application of BEISOL HTN is not limited to short time processes (e.g. pad steam process with 1 min steaming time) but it is also possible to apply it on plants which need a longer reaction time (e.g. combi steamer, jig).

Heavy metals impair the enzymatic decomposition effect of enzyme products very much. It is thus of advantage to add a sequestering agent which is compatible with enzymes such as e.g. BEIXON NE to the desizing liquor.

To avoid that the pH value gets beyond the enzyme compatible pH range of the liquor, e.g. by singeing dust, it is of advantage to add suitable buffering substances such as NEUTRACID NWM 200.

For a best possible wetting and liquor pick-up of the substrate in the padding process we recommend the addition of a special deaerating agent such as KOLLASOL OCE.

Application Technique

Diluting Instructions

BEISOL HTN can be diluted with water to any ratio.

Application Fields

BEISOL HTN can be applied for all common desizing methods, cold pad batch methods, processes in long liquor and continuous processes.



The desizing effect depends on the application amount, size layer, the size itself and the desizing process. The higher the enzyme concentration, the faster the starch decomposition.

Recipe Proposals

1. Desizing in long liquors

0.5 - 2.0 % BEISOL HTN 1.0 - 4.0 % FELOSAN NKB 1.0 - 3.0 % BEIXON NE

Treatment temperature: 70 - 95 °C Treatment time: 15 - 60 min Wash out: hot and cold

2. Cold pad batch method

1.0 - 3.0 g/l BEISOL HTN
3.0 - 5.0 g/l FELOSAN NKB
0.5 - 2.0 g/l KOLLASOL OCE
3.0 - 5.0 g/l BEIXON NE

0.0 - 1.0 g/I NEUTRACID NWM 200

Liquor pick-up: 80 - 100 %Impregnation temperature: $60 - 90 \degree C$ Dwelling time: 6 - 16 h

Dwelling temperature room temperature Wash out: hot and cold

3. Pad steam method

1.0 - 3.0 g/l BEISOL HTN
3.0 - 5.0 g/l FELOSAN NKB
0.5 - 2.0 g/l KOLLASOL OCT
3.0 - 5.0 g/l BEIXON NE

0.0 - 1.0 g/I NEUTRACID NWM 200

Liquor pick-up: 80 - 100 % Impregnation temperature: $30 - 70 \degree C$

Dwelling time: 1-5 min with saturated steam

Wash out: hot and cold



4. Subsequent desizing

If the decomposition of the starch size is insufficient, it can be subsequently desized in the washing machine with the addition of BEISOL HTN.

1.0 - 3.0 g/I BEISOL HTN

20 – 60 sec at 95 °C best application in the 2nd or 3rd washing bath

Washing off decomposition products

To assess the desizing effect a thorough washing is necessary. A short washing in cold water is not sufficient. To obtain perfectly desized goods, a hot, possibly alkaline wash off is advisable.

We reserve the right to modify the product and technical leaflet.

Our department for applied technique is always at your service for further information and advice.

Our technical advice and recommendations given verbally, in writing or by trials are believed to be correct. They are neither binding with regard to possible rights of third parties nor do they exempt you from your task of examining the suitability of our products for the intended use. We cannot accept any responsibility for application and processing methods which are beyond our control.

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