

Powder product to precipitate oxalic acid and proteins in the beer wort

### Product Description

AnGus<sup>1516</sup>® is a powder product used to precipitate oxalic acid and proteins in the beer wort and thus serves for the prevention of gushing. The product is a genuine alternative to calcium chloride and calcium sulphate, the commonly used products in brewing liquor processing, since an uptake of chloride or sulphate ions together with a technological impact in this connection does not occur.

Tested by specialized laboratories for purity and quality.

### Aim of Treatment

After addition AnGus<sup>1516</sup>® precipitates oxalic acid in the beer wort (growing of calcium oxalate crystals on the product) and, at the same time, reduces the protein content in the cast wort.

### Product and Effect

By the addition of AnGus<sup>1516</sup>® to the full wort copper, the oxalic acid is bound during the cooking process and the formed calcium oxalate is then almost entirely separated together with the hot break formed later on in the whirlpool. Proteins lowering CO<sub>2</sub> bondability are also reduced. After reaction end the calcium : oxalate ratio in the wort remains stable.

### Application and Dosage

AnGus<sup>1516</sup>® is added to the beer wort at the beginning of the cooking process.

Dependent on the nature of the respective malt crop and the quality of the malt (gushing potential), a dosage of 30-60 g per hL wort is recommended. For malt crops with low gushing potential, an addition of 20-40 g per hL wort is sufficient.

By this dosage and the resulting calcium oxalate precipitation in the wort is assured that in the wort a stable ratio of calcium sulphate : calcium oxalate > 5:1 according to P. Anderegg, F. Schur and H. Pfenninger, BR 91, 133 (1980) can be kept.

By the application of AnGus<sup>1516</sup>® the following parameters are obtained:

- stable ratio of calcium sulphate : calcium oxalate > 5:1
- no uptake of chloride or sulphate ions
- calcium oxalate precipitation during wort cooking and separation in the whirlpool or in the wort filter
- reduction of the protein content in the cast wort
- assured improvement of the beer foam by preserving the foam-positive proteins
- no deterioration of the chemical-physical stability and shelf life
- improved hops yield
- increased drinkability of the beers

### Storage

The product is strongly hygroscopic, reseal opened packagings immediately and tightly.

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