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Technical Data Sheet

Tannic acid

1. DESCRIPTION

Tannic acid is a light yellow granular powder specially purified for food applications. This product is a 100% natural material extracted from renewable plant materials such as Oak wood.

- Specifically developed for the stabilisation of beer during the end filtration.
- Can be added in-line before end-filtration to improve colloidal stability by

selectively removing haze forming proteins.

2. STORAGE AND SHELF LIFE

- Store away from direct sunlight
- Keep containers sealed when not in use
- Maximum storage temperature 25° C
- Minimum storage temperature 5 ° C
- The shelf life at the recommended storage temperature is 5 years from date of manufacture

3. PACKAGING

25 kg Bag

1 kg Bag

4.USING THE PRODUCT

Tannic acid should be added to water to give a final concentration of 5-10%. Typical dosage levels are 1-2 g/hl and can be added in-line before end-filtration. Addition is done proportionally with a dosage pump.

Due to its granular form Tannic Acid easily dissolves in brewing water at room temperature.

5. GUIDELINES FOR USE

DO

- Check that the product is within its shelf life before use
- For more detailed information regarding beer stabilisation with Tannic Acid please do not hesitate to ask for our technical advice.

DO NOT

• Breathe Dust

6.TECHNICAL SUPPORT

For Health & Safety information on this product, , please see the Materials Safety Data Sheet (MSDS)

For support and advice on the use of this product, please call or e-mail our Technical Administrator:-Telephone: - + 44 (0)115 978 5494

E-Mail:- laboratory@murphyandson.co.uk

| 7. SPECIFICATION | | | |
|---------------------------------|--------------|--|-----------|
| Composition | | High molecular weight hydrolysable tannic acid | |
| Appearance | | Light yellow granular powder | |
| Odour | | Practically odourless | |
| Taste | | Neutral / slight astringent taste | |
| Density | | 0.35 -0.45 | g/cm3 |
| Purity (on dry material - HPLC) | | Min. 92% | |
| Gallic acid (HPLC) | | Max. 0.1% | |
| Heavy metals (FCC IV) | | Max. 20 ppm | |
| Ash Content | | Max. 0.01 % | |
| Moisture | | Max. 7 % | |
| Colour Gardner (1:10; alcohol) | | Max. 6 | |
| Solubility in H2O | | Clear | |
| pH (1% in water) | | 3.5 - 4.5 | |
| 8 .REFERENCE | | | |
| Product | Tannic Acid | Product | Code Tana |
| Authorised by | C.J. Fleming | Formulation | FM08 |
| Issue No. | 1.0 | Date | 28/04/08 |

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