

# Floctan 4

## >>> Tannic Acid Floctan 4 Product data-sheet



Floctan 4 is a next generation product specially designed for flock activation processes. By using patented proprietary modification techniques some of the traditional drawbacks of natural tannins have been ameliorated. Floctan 4 is based on chemically modified high molecular weight hydrolysable tannic acid, and was specially developed for electrostatic flock activation.

### >>> PROPERTIES<sup>(\*)</sup>

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|--|---|
| ▪ Appearance:                                  | off-white granular powder, free of visible impurities |
| ▪ Odour:                                       | none.   |
| ▪ Moisture:                                    | max. 7.0 %  |
| ▪ Density:                                     | 0.30 – 0.40 g/cm <sup>3</sup>                         |
| ▪ pH (1 % in water):                           | 4.5 – 5.0   |
| ▪ Colour Gardner (1:10; alcohol):              | max. 8  |
| ▪ Solubility in H <sub>2</sub> O (15 % (m/V)): | clear   |
| ▪ Staining test:                               | pass  |

<sup>(\*)</sup> Only selected data is represented here, for a full set of specifications we refer to our **Specifications** sheet.

Floctan 4 can be used in high end applications such as upholstery and automotive applications where it imparts improved colour stability or it can also be used in low end, low cost activations where it can impart cost reductions by reducing water, energy and usage of other process chemicals.

### >>> USAGE

For high-end applications where colour stability is of great importance a traditional 2-bath multi-step processes should be used.

Cost effective activations using Floctan 4 can be achieved in 1-bath or even 1-pot systems without significant loss of activity. Due to the chemical modifications in Floctan 4, flock activations without softeners are possible.

Typical Floctan 4 dosage levels are 1-3 % omf. Exact dosage levels are dependant on the end application, titer of the fibre and type and depth of the colour. More detailed information is provided in the specific **Application Fact Sheet** on this subject.

To prevent local over-dosage Floctan 4 is best added as a 5-10 % (m/V) solution. Due to its delivery form Floctan 4 easily dissolves in cold, or even better in hot water (e.g. 60°C).

As Floctan 4 concentration increases shelf life of these solutions increases: 1 % (m/V) solutions should be used within the same day, 5-10 % (m/V) solutions can be stored for 1 week at room temperature, assuming no micro-biological contamination has occurred.

Maximum uptake on nylon 6.6 is achieved at pH = 3-3.5. pH can be adjusted with acetic acid; if water with high levels of alkaline is used formic acid can be required. Floctan 4 should not be used in alkaline conditions.

High concentrations of dissolved iron or copper will cause the formations of respectively dark blue or brown tannic acid-metal complexes, and should therefore be avoided. Even small amounts of iron in the ppm range will already cause a marked coloration of the treatment liquors. This discoloration does not negatively influence electrostatic properties of the flock but can lead to a darkening of the colour.

We advice against the use of metal chelating agents in the flock activation bath to remedy excessive amounts of dissolved iron because these agents can interfere with the normal flock activation process.

### >>> STORAGE AND HANDLING

Floctan 4 does not require special storage conditions and has a shelf life of min. 5 years if stored in a dry area at ambient temperatures (i.e. 5-25°C) in its original closed packaging. The product is not frost sensitive.

Floctan 4 is significantly more stable than other tannins; nevertheless prolonged exposure of Floctan 4 to light can still cause a gradual yellowing of the product. Floctan 4 drums should not be left open in areas with high levels of humidity for prolonged periods of time because due to moisture uptake caking of the product can occur. Therefore keep the lid on the drum if Floctan 4 is not in use.

Due to its delivery form Floctan 4 produces little or no dust during handling.

### >>> PACKAGING

Floctan 4 is available as a spray-dried product in 25 kg fibre drums lined with an inner polyethylene bag.

### >>> FURTHER INFORMATION

Further safety information is provided in our **Material Safety Data Sheet**.

Upon simple request a controlled copy of our **Specifications** can be provided by our QC-department.

Information on usage and applications can be found in our **Application Fact Sheet**. Our R&D department can provide you further detailed information on composition and regulatory status.

Deliveries are accompanied by a **Certificate of Analysis**.

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