

Tanex 40

>>> Tannic Acid Tanex 40 Product data-sheet

Tanex 40 is hydrolysable tannin suitable for industrial applications. Typical applications include boiler water treatment, anti-corrosion applications, etc... Tanex 40 is a 100 % natural material extracted from renewable plant materials using dedicated strictly controlled production facilities.

>>> PROPERTIES^(*)

▪ Delivery form:	Yellow brown granular powder, free of visible impurities
▪ Odour:	Slight in solution, typical tannic acid
▪ Purity (on dry material):	min 93 %
▪ Moisture	max 7 %
▪ Density	0.35 – 0.45 g/cm ³
▪ Colour Gardner (1:10; alcohol):	max. 13
▪ pH (1 % in water):	2.5 – 3.5
▪ Solubility in H ₂ O:	clear

^(*) Only selected data is represented here, for a full set of specifications we refer to our **Specifications** sheet.

>>> USAGE

Due to the strong metal complexing properties of hydrolysable tannins, Tanex 40 is very effective in rust converter formulations or in boiler water treatment. An insoluble iron-tannate complex is formed with good adhesion properties on iron or steel surfaces thus preventing further corrosion.

In a typical rust converter Tanex 40 will be used in combination with phosphoric and oxalic acid (e.g. 6:4 mix ratio – pH = 3 – 4). Glycols are often added to improve surface wetting. An appropriate wetting agent can also be used in order to improve the penetration of the rust converter in the rust.

When binders are incorporated in the formulation care must be taken to insure that the binder characteristics are compatible with the anion and acidic nature of Tanex 40.

Due to its strong anti-oxidising properties Tanex 40 is also very suitable as a dissolved oxygen scavenger in boiler water treatment. pH is typically set to values in between 9 – 11.

Tannic acid also interferes in the scale formation process and instead of hard scales a fine particle size sludge is formed which can easily be removed with the boiler water when systems are drained.

In boiler water treatments dosage levels of 50 – 100 mg/l are used.

Due to its granular form Tanex 40 easily dissolves in cold water or even better in hot water. Solutions up to 50 % weight/volume can be prepared. However such solution are highly viscous and are especially at lower temperature more difficult to handle.

>>> STORAGE AND HANDLING

Tanex 40 does not require special storage conditions and has a shelf life of min. 5 years if stored in a dry area in its original closed packaging. The product is not frost sensitive and normal ambient storage temperatures (i.e. 5-25°C) suffice.

Prolonged exposure of Tanex 40 to light can cause a gradual colour shift. This does not influence technical performance of the product unless colour is a critical parameter in the application. Storage of Tanex 40 open to the atmosphere can result in moisture uptake from the surroundings. Therefore reseal the inner plastic bag and keep the lid on the fibre drum if Tanex 40 is not in use.

Due to its granular form Tanex 40 produces little or no dust during handling.

>>> PACKAGING

Tanex 40 is available as a spray-dried granular product in 25 kg or 100 lbs 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 **Technical Leaflets**. Our R&D department can provide you further detailed information on composition and regulatory status.

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

CAS Nr.: 1401-55-4

EINECS/ELINCS: 215-753-2

The information provided in this product data sheet is based on the present state of our knowledge. Some of the applications mentioned in this document are protected by patent law. Ajinomoto OmniChem nv/sa cannot be held responsible for patent law infringements and the customer should contact the patent holder if so required. Due to the many process parameters involved we are not able to submit a general recommendation. It only shows without liability on our part the uses to which our products can be put. However, Ajinomoto OmniChem nv/sa cannot be held responsible for the consequences of the application of the above described product.