

Crude Tall Oil – Soft wood Tall Oil (STO) Product Datasheet

Item number: 10-023

General information

Crude Tall Oil is a viscous oily liquid of brown and dark brown color with unpleasant odor. The oil composition depends on the wood species when cooking the sulfate pulp. The properties of the product depend upon the Kraft cooking process raw material, which can be:

- a) Soft wood – Soft wood Tall Oil (STO)
- b) Hard wood – Hard wood Tall Oil (HTO)
- c) Mixed wood – Mixed wood Tall Oil (MTO)

Crude tall oil is a natural blend of resin and fatty acids, neutral and oxidized substances. Resin acids are high-molecular unsaturated acids of cyclic diterpene structure. Main acids are abietic and primaric ones.

Fatty acids are high-molecular, mainly unsaturated carboxylic acids of linear structure with different unsaturation degree. Main acids are oleinic acid, linoleic acid and their isomers. There is also a dash of saturated acids such as palmitic acid, stearic acid and others. Unsaponifiable substances are aliphatic hydrocarbons, terpenic compounds, phenols and others.

Tall oil is insoluble in water, soluble on organic solvents, non-toxic.

Specification and typical analysis

Properties	specification
Acid number	120 - 140
Content of Unsaponifiables	10 % - 20 %
Water content	0.2 % - 1.4 %
Rosin Acids	17 % - 35 %
Lignin and solids	0.1 % - 2.1 %

Delivery form

The product is usually supplied in tank containers, flexi tanks or road tankers.