

# Crude Tall Oil Product Datasheet

Item number: 10-037

## General Information

Crude Tall Oil (CTO) is obtained from the wood pulping industry. It is a dark brown viscous liquid extracted and processed from softwoods and hardwoods. Crude Tall Oil has a complex composition of fatty acids, resin acids and neutrals.

Crude Tall Oil is suitable for distillation or other applications. Since being nature born material it has variation in its physical and chemical properties and figures below are meant to be only typical for Crude Tall Oil.

## Typical Analyses of Crude Tall Oil

Analysis	Value	Method
Appearance	Liquid (at standard temperature and pressure)	
Colour	Dark brown to dark amber	
Odour	Sulphur compounds	
Melting point / freezing point	- 3.15°C (270 ± 3K) (pour point)	OECD TG 102
Boiling point / range	346.85°C (620 K)	OECD TG 103
Flash point	121 – 185°C	ASTM D3278
Vapour pressure at 25 °C	22.7 Pa	PFA 2010b
Relative density	958.7 – 969.4 kg/m <sup>3</sup>	ASTM D1475
Solubility in water	7.35 x 10 <sup>-2</sup> g/l 20°C (pH 4.6 - 5.5)	OECD TG 105
Solubility in other solvents	Acetone, diethyl ether, ethanol	
Partition coefficient: n-octanol / water	Log KOW = 4.9 – 7.7 (pH 2.0) Log KOW = 3.2 – 6.8 (pH 5–6)	
Auto-ignition temperature at 99.19–100.85 kPa, 19–20°C	276°C	EU method A.15
Viscosity at 22 °C	203–825 cP	ASTM D2196
Viscosity at 50 °C	49–121 cP	ASTM D2196
Surface tension at 21 °C	66.7 mN/m	OECD TG 115

## Product handling

Crude Tall Oil should be delivered at around 60 °C and the recommended minimum storage temperature is 40 °C. If Crude Tall Oil is subjected to cold temperatures during storage or transportation it may become viscous or show some precipitation or crystallization. This is a normal characteristic and not a defect. If affected the material should be gently heated to max. 75 °C and circulated or agitated to restore the original condition.

## Delivery form

Bulk liquid in road tanker, rail tank wagon or ISO-container.

### Disclaimer:

In all applications of Crude Tall Oil it is the sole responsibility of the buyer to respect and comply with any valid intellectual property rights of third parties.