

Metsä CTO JNo

Date: 08/11/2019

Crude Tall Oil

Raw material

Pine (pinus sylvestris) 55–100%	Spruce (picea abies) 0–45%
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Typical product characteristics

Property	Value	Method
Acid number	Typical 162 mg KOH/l (variance 159–164)	SCAN-T 11:72
Resin acid	Typical 34% (variance 32–36)	SCAN-T 14:78
Water content	Typical 0.5% (variance 0.2–0.7)	ASTM D 890-98
Soap number	Typical 0.07 mg KOH/l (variance 0–0.1)	PCTM 13

Mill certificates

ISO 14001	Quality management system	✓
ISO 9001	Quality system	✓
PEFC™ COC	Chain of Custody	✓
FSC® COC	Chain of Custody, Controlled wood	✓
ISO 50001	Energy management system	✓
OHSAS 18001	Health and safety management system	✓
ISO 22000	Food safety management system	✓

Origin of raw material

Finland	87%
Russia	11%
Estonia	1%
Latvia	1%
PEFC	80%
FSC	9%