

## SPECIFICATION SHEET

**VERSION** 4,00      **VERSION DATE** 08/04/09      **PRINT DATE** 10/08/22

**PRODUCT** PINE OIL, AUSTRIAN  
**APPLICATIONS** Raw material for industrial use intended for the manufacture of flavours and/or fragrances.  
**IUPAC NAME** FIR NEEDLE OIL  
**PLANT OF ORIGIN** Abies sibirica ledeb.  
**PART OF THE PLANT** FIR NEEDLE  
**SYNONYMS**

**CAS** 91697-89-1  
**CAS 2** 8021-29-2  
**EINECS** 294-351-9

**FEMA** 2905  
**TARIFF NUMBER** 3301294900

**FOOD GRADE CERTIFICATE** AVAILABLE ON REQUEST  
**REACH REGISTRATION NO.** 01-2120738835-44

### SPECIFICATIONS

**ASPECT AT 20°C** CLEAR MOBILE LIQUID  
**COLOUR** COLORLESS TO PALE YELLOW  
**ODOUR** PINE, WOODY, GREEN  
**TASTE**  
**DENSITY AT 20°C (g / ml)** 0,885 - 0,895  
**DENSITY 25/25** -  
**REFRACTIVE INDEX nD20** 1,4650 - 1,4750  
**REFRACTIVE INDEX nD25** -  
**OPTICAL ROTATION (°)** -55,00 / -45,00  
**BOILING POINT (°C)** -  
**MELTING POINT (°C)** -  
**FLASH POINT (°C)** 42,00  
**ASSAY (% GC)** BORNYL AC. 16-28%;CAMPHENE 15-25%;A-PINENE 10-20%  
**ACID VALUE (mg KOH/g)** -  
**SOLUBILITY** INSOLUBLE IN WATER;SOLUBLE IN ETHANOL(OPALESCENCE)  
**VAPOUR PRESSURE** NOT DETERMINED  
**OTHER SOLUBILITIES** SOLUBLE IN ETHANOL

**OTHER TECHNICAL DATA** PEROXIDE INDEX < 10 mmol/L

### STABILITY AND STORAGE

KEEP IN TIGHTLY CLOSED CONTAINER IN A COOL AND DRY PLACE, PROTECTED FROM LIGHT. WHEN STORED FOR MORE THAN 24 MONTHS, QUALITY SHOULD BE CHECKED BEFORE USE.

PURGE HEADSPACE WITH NITROGEN.

WE BELIEVE THE ABOVE INFORMATION TO BE CORRECT BUT WE DO NOT PRESENT IT AS ALL INCLUSIVE AND AS SUCH SHOULD BE USED AS A GUIDE. IT IS THE SOLE RESPONSIBILITY OF THE RECEIVER OF OUR PRODUCT TO COMPLY WITH EXISTING REGULATIONS AND INSTRUCTIONS.

THIS PRODUCT HAS NOT BEEN FILTERED DUE TO TECHNOLOGICAL REASONS. WE RECOMMEND NOT TO USE IT UNLESS FILTERED WHEN USED AS A RAW MATERIAL IN FOOD INTENDED FOR FINAL CONSUMERS.