

TECHNICAL PRODUCT SPECIFICATION

Product Description: Pine Oil

Article-No.: 141222

Physical Data

Appearance (according to FL M-AP-001): liquid, clear, colourless
Sensoric profile (according to FL M-SP-002): When used properly typical sensoric profile.
Flashpoint (according to FL ASTM D6450): 89 °C
Relative density (according to FL EuAB 2.2.5): 0.973 ... 0.993 (d20/4)
Refractive index (according to FL EuAB 2.2.6): 1.454 ... 1.474 (nD20)
Optical rotation (according to FL EuAB 2.2.7): -4° ... +6° (α20)

Microbiological Information

References: German § 64 LFBG collection of methods and ISO-Norm
Total Plate Count: max. 1,000 / g
Yeasts: max. 100 / g
Moulds: max. 100 / g
Enterobacteriaceae: max. 10 / g
Coliforms: negative in 0.1 g
Escherichia coli: negative in 1 g
Salmonella: negative in 50 g

Heavy Metals Information

There are no limiting values for heavy metals in flavour Regulation (EC) No. 1334/2008. The former flavour directive 88/388/EEC has therefore been taken as a basis for limiting values.

Arsenic (As): max. 3 ppm
Cadmium (Cd): max. 1 ppm
Mercury (Hg): max. 1 ppm
Lead (Pb): max. 10 ppm

Nutritional Information

References:	Codex Alimentarius „Guidelines on Nutritional Labelling (CAC/GL-2-1985)”; IOFI „Information Letter No 1438 - Energy value of flavourings”; calculated average values
Ethanol:	0.00 Weight % 0.00 Vol.%
Energy:	0 kcal/100 g 0 kJ/100 g
Proteins:	0.0 g/100 g
Carbohydrates:	0.0 g/100 g
Sugars:	0.0 g/100 g
Fat:	0.0 g/100 g
Fibres:	0.0 g/100 g
Sodium chloride:	0.0 g/100 g

Suitability for Vegetarian Diets

Ovo-lacto-vegetarian ¹ :	Yes
Vegan ² :	Yes

¹ (no meat products contained)

² (no animal products contained including honey)

Storage and Handling

Storage:	In tightly closed, preferably full containers in cool and dark storage area. Protect from light.
Storage temperature:	Recommended storage temperature 10-20 °C.
Minimum shelf life:	In suitable, originally closed containers minimum 36 months. If used after minimum shelf life, the material has to be analyzed properly.

We expressly state that information regarding microbiology, heavy metals, nutritional values and suitability for particular nutritional uses is not based on analyses of the actual product, but instead is provided on the basis of supplier statements or general empirical values that apply in principle to products such as the aforementioned one. Therefore, we assume no liability for this information with regard to use of this information or use of the product by the customer. The customer is responsible for verifying this information if necessary, e.g., by conducting its own analyses, and ensuring marketability.

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