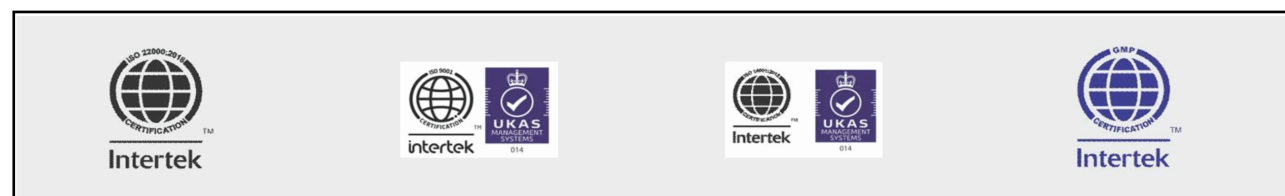


## TECHNICAL DATA SHEET

**Sr. No. : UL3000172-V-04**
**Issue Date: 13/04/2023**

**QUALITY CONTROL** : We declare that certificate of analysis of this material is inspected according to quality parameters as below :

<b>Item Code</b>	<b>UL3000172</b>
<b>Item Name</b>	<b>FIR NEEDLE OIL SIBERIAN</b>



Test Parameters	Specifications
<b>CAS #</b>	8021-29-2
<b>EINECS #</b>	294-351-9
<b>FEMA#</b>	2905
<b>Botanical Name</b>	Abies sibirica
<b>Description</b>	Colourless to Pale yellow mobile liquid with Characteristic sweet, piney odour.
<b>Origin</b>	The volatile oil obtained by steam distillation from needles and twigs of Abies sibirica Lebed.
<b>Appearance</b>	Colourless to Pale yellow
<b>Physical Status</b>	Liquid
<b>Flash Point (Closed cup) °C</b>	44°C
<b>Refractive Index</b>	1.460 - 1.480 @20°C
<b>Relative Density</b>	0.890 - 0.915 @25°C
<b>Optical Rotation</b>	-45° to -30°
<b>Solubility in Alcohol</b>	Soluble
<b>Solubility in Water</b>	Insoluble
<b>Assay by GC</b>	Bornyl acetate: 23-30% delta-3-carene: 8-20% beta-Pinene: 1.5-4% Camphene: 20-30% alpha-Pinene: 10-20%
<b>Shelf Life</b>	12 months with proper storage conditions.
<b>Legislation</b>	Natural
<b>Stability</b>	Avoid strong acids strong bases & all oxidizing agents.
<b>Uses</b>	Fragrance and Flavour application.

<b>PACKING &amp; STORAGE</b>	Should be stored in cool, dry, well ventilated places in full, tightly sealed containers, protected from light & source of ignition.
<b>HANDLING PRECAUTION</b>	Handle in adequate ventilation Avoid skin and eye contact use goggles or face shield and wear protective clothing

This is a system generated document hence need not be authenticated.

