

## **TECHNICAL DATA SHEET**

6r. No. : RM0047-V-0	02		Printed Date 31/01/2017	
Item Code :	RM0047		Date : 17/06/2013	
Item Name :	FIR NEEDLE	OIL	Version : 02	
CAS #		8021-29-2		
FEMA #		2905		
EINECS #		294-351-9		
Botanical Name		Abies siberica Ladeb		
Product Description		Colourless to slightly yellow having characteristic odour.		
Origin		Obtained by steam distillation from le	Obtained by steam distillation from leaf/twigs of Abies siberica	
PHYSICO-CHEMICAL	PROPERTIES :			
Appearance		Colourless to slightly yellow		
Physical Status		LIQUID		
Flash Point (Closed o	up) °C	43°C		
Refractive Index		1.460-1.480 @20°C		
Relative Density		0.890-0.915 @20°C		
Optical Rotation		-45° to -30°		
Solubility in Alcohol		1:2 (v/v) in 90% ethanol		
Solubility in Water		Insoluble		
Main Components by	GLC	Bornyl Acetate: 23-30%	Alpha Pinene: 10-20%	
		Limonene: 4-9%	Camphene: 20-30%	
		Delta-3-Carene: 8-20%	Beta Pinene: 1.5-4%	
		Alpha Pinene: 10-20%	beta Phellandrene: 1.5-5%	
Shelf Life		12 months under recommended storage conditions.		
Legislation		Natural		
Stability		Avoid strong acids strong bases and all oxidising agents		
Uses		Fragrance & Flavour Application		
HANDLING PRECAUT	ΓΙΟΝ	Handle in adequate ventilation, avoid skin and eye contact, use goggles or face shield and wear protective clothing		
PACKING & STORAGE		and protected from light. Store in tigh	Store at ambient temperature, dry and well-ventullated area, away from heat source and protected from light. Store in tightly sealed original containers, packed in Aluminium bottles, HDPE Food grade cans, MS Coated Drums or GI Drums. Keep air contact min	

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Malledijk 3H, 3208 LA Spijkenisse, Netherlands ultranl@ultraintl.com \* www.ultranl.com







