CERTIFICATE OF ANALYSIS
PRODUCT NAME: FIR NEEDLE, ESSENTIAL OIL
BATCH NUMBER: 4483204
PRODUCT INCI: ABIES SIBIRICA OIL
COUNTRY OF ORIGIN - BULGARIA
CAS NUMBER: 91697-89-1
EINECS NUMBER: 249-351-9
BEST BEFORE DATE: September 2025

ANALYTICAL DETAILS	RANGE	RESULT
APPEARANCE	LIQUID	
COLOUR	COLOURLESS TO PALE YELLOW LIQUID	
Odour	CHARACTERISTIC	
SPECIFIC GRAVITY @ 20°C	0.875 – 0.898	
Refractive Index @ 20°C	1.460 – 1.480	
OPTICAL ROTATION (°C)	-60.0 то -38.0	

STORAGE CONDITIONS STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

ALLERGEN STATEMENT

PRODUCT NAME: FIR NEEDLE, ESSENTIAL OIL

COSMETIC ALLERGENS

Annex Illa		CAS NUMBER:	TOTAL ALLERGEN
Reference:			INCLUSION (%):
67	AMYL CINNAMAL	122-40-7	0.000
68	BENZYL ALCOHOL	100-51-6	0.000
69	CINNAMYL ALCOHOL	104-54-1	0.000
70	CITRAL	5392-40-5	0.000
71	EUGENOL	97-53-0	0.000
72	HYDROXY-CITRONELLAL	107-75-5	0.000
73	ISO EUGENOL	97-54-1	0.000
74	AMYLCIN-NAMYL ALCOHOL	101-85-9	0.000
75	BENZYL SALICYLATE	118-58-1	0.000
76	CINNAMAL	104-55-2	0.000
77	COUMARIN	91-64-5	0.000
78	GERANIOL	106-24-1	0.000
79	HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE	31906-04-4	0.000
80	ANISE ALCOHOL	105-13-5	0.000
81	BENZYL CINNAMATE	103-41-3	0.000
82	FARNESOL	4602-84-0	0.000
83	BUTYLPHENYL METHYLPROPIONAL	80-54-6	0.000
84	LINALOOL	78-70-6	0.000
85	BENZYL BENZOATE	120-51-4	0.000
86	CITRONELLOL	106-22-9	0.000
87	HEXYL CINNAM-ALDEHYDE	101-86-0	0.000
88	LIMONENE	5989-27-5	18.0 - 30.0
89	METHYL 2-OCTYNOATE	111-12-6	0.000
90	ALPHA-ISOMETHYL IONONE	127-51-5	0.000
91	EVERNIA PRUNASTRI EXTRACT	90028-68-5	0.000
92	EVERNIA FURFURACEA EXTRACT	90028-67-4	0.000

FOOD ALLERGENS

Annex Illa		PRESENT IN	CONTAMINATION	FACTORY
Reference:		PRODUCT:	PRESENCE:	PRESENCE:
1	CEREALS (CONTAINING GLUTEN)	NO	NO	YES
2	CRUSTACEANS	NO	NO	NO
3	EGGS	NO	NO	NO
4	FISH	NO	NO	NO
5	PEANUTS	NO	NO	YES
6	SOYA	NO	NO	YES
7	MILK	NO	NO	YES
8	NUTS	NO	NO	YES
9	CELERY & CELERIAC	NO	NO	YES
10	MUSTARD	NO	NO	YES
11	SESAME	NO	NO	YES
12	SULPHUR DIOXIDE & SULPHITES	NO	NO	NO
13	LUPIN	NO	NO	NO
14	MOLLUSC	NO	NO	NO

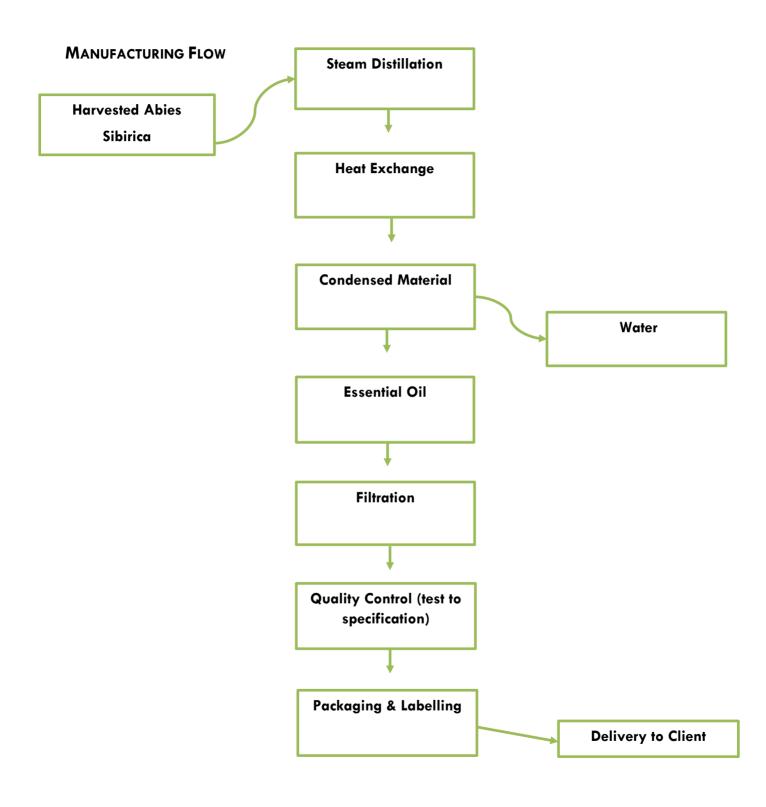
MANUFACTURING FLOW & INCI STATEMENT

PRODUCT NAME: FIR NEEDLE, ESSENTIAL OIL

INCI STATEMENT

We can hereby confirm the following composition breakdown & manufacturing process flow.

INCI Name	% Inclusion	CAS Number
Abies Sibirica Oil	100	91697-89-1



GMO Statement

PRODUCT NAME: Fir Needle

MADAR Corporation Limited can confirm that the above listed product is GMO Free.

20/09/2022

IFRA STATEMENT

PRODUCT NAME: FIR NEEDLE, ESSENTIAL OIL

PRODUCT INCI: ABIES SIBIRICA OIL

WE CERTIFY THAT THE ABOVE-MENTIONED MATERIAL CONFORMS TO THE IFRA 50 CODE OF PRACTICE AND CONTAINS THE FOLLOWING RESTRICTED COMPONENTS THAT ARE LISTED IN THE 50TH AMENDMENT OF THE IFRA CODE OF PRACTICE:

Restricted Component	Cas No:	% Level in Product	IFRA Standard
Limonene	5989-27-5	≤ 30.0	Specification Std

IFRA Category	% Maximum Use Level
IFRA Category 1	Not approved
IFRA Category 2	Not restricted
IFRA Category 3	Not restricted
IFRA Category 4	Not restricted
IFRA Category 5A	Not restricted
IFRA Category 5B	Not restricted
IFRA Category 5C	Not restricted
IFRA Category 5D	Not restricted
IFRA Category 6	Not approved
IFRA Category 7A	Not restricted
IFRA Category 7B	Not restricted
IFRA Category 8	Not restricted
IFRA Category 9	Not restricted
IFRA Category 10A	Not restricted
IFRA Category 10B	Not restricted
IFRA Category 11A	Not restricted
IFRA Category 11B	Not restricted
IFRA Category 12	Not restricted

IFRA Category	Product Type	Flavour use	Phototoxicity
Category 1	Lip Products of all types (solid and liquid lipsticks, balms, clear or coloured, etc.). Children's toys.	Yes	Applicable (leave-on products)
Category 2	Deodorant and antiperspirant products of all types including any product with intended or reasonably foreseeable use on the axillae or labelled as such (spray, stick, roll-on, under-arm, deo-cologne, etc.). Body sprays (including body mist)	No	Applicable (leave-on products)
Category 3	Eye products of all types (eye shadow, mascara, eyeliner, eye make-up, eye masks, eye pillows, etc.) including eye care and moisturizer Facial make up and foundation. Make-up remover for face and eyes. Nose pore strips. Wipes or refreshing tissues for face, neck, hands, body. Body and face paint (for children and adults). Facial masks for face and around the eyes	No	Applicable (leave-on products)
Category 4	Hydro alcoholic and non-hydro alcoholic fine fragrance of all types (Eau de Toilette, Parfum, Cologne, solid perfume, fragrancing cream, aftershaves of all types, etc.). Fragranced bracelets. Ingredients of perfume kits and fragrance mixtures for cosmetic kits. Scent pads, foil packs. Scent strips for hydro alcoholic products	No	Applicable (leave-on products)
Category 5A	Body creams, oils, lotions of all types. Foot care products (creams and powders). Insect repellent (intended to be applied to the skin). All powders and talc (excluding baby powders and talc).	No	Applicable (leave-on products)
Category 5B	Facial toner. Facial moisturizers and creams	No	Applicable (leave-on products)
Category 5C	(women facial creams) Hand cream. Nail care products including cuticle creams, etc. Hand sanitizers	No	Applicable (leave-on products)
Category 5D	Baby cream/lotion, baby oil, baby powders and talc.	No	Applicable (leave-on products)
Category 6	Toothpaste. Mouthwash, including breath sprays. Toothpowder, strips, mouthwash tablets	Yes	Applicable (leave-on products)
Category 7A	Hair permanent or other hair chemical treatments (rinse-off) (e.g. relaxers), including rinse-off hair dyes	No	Applicable (leave-on products)
Category 7B	Hair sprays of all types (pumps, aerosol sprays, etc.). Hair styling aids non-sprays (mousse, gels, leave- on conditioners). Hair permanent or other hair chemical treatments (leave-on) (e.g. relaxers), including leave-on hair dyes. Shampoo - Dry (waterless shampoo). Hair deodorizer		
Category 8	Intimate wipes. Tampons. Baby wipes. Toilet paper (wet).	No	Applicable (leave-on products)
Category 9	Bar soap. Shampoo of all type. Cleanser for face (rinse-off). Conditioner (rinse-off). Liquid soap. Body washes and shower gels of all types. Baby wash, bath, shampoo. Bath gels, foams, mousses, salts, oils and other products added to bathwater. Foot care products (feet are placed in a bath for soaking). Shaving creams of all types (stick, gels, foams, etc.). All depilatories (including facial) and waxes for mechanical hair removal. Shampoos for pets	NO	Applicable (rinse-ofj products)
Category 10A	Hand wash laundry detergent (including concentrates). Laundry pre-treatment of all types (e.g. paste, sprays, sticks). Hand dishwashing detergent (including concentrates). Hard surface cleaners of all types (bathroom and kitchen cleansers, furniture polish, etc.). Machine laundry detergents with skin contact (e.g. liquids, powders) including concentrates. Dry cleaning kits. Toilet seat wipes. Fabric softeners of all types including fabric softener sheets. Household cleaning products, other types including fabric cleaners, soft surface cleaners, carpet cleaners, furniture polishes sprays and wipes, leather cleaning wipes, stain removers, fabric enhancing sprays, treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics). Floor wax. Fragranced oil for lamp ring, reed diffusers, pot-pourri, liquid refills for air fresheners (non-cartridge systems), etc. Ironing water (Odorized distilled water).	NO	Applicable (rinse-of, products)
Category 10B	Animal sprays – sprays applied to animals of all types. Air freshener sprays, manual, including aerosol and pump. Aerosol/spray insecticides	NO	Applicable (rinse-ofj products)
Category 11A	Feminine hygiene conventional pads, liners, interlabial pads. Diapers (baby and adult). Adult incontinence pant, pad. Toilet paper (dry).	NO	Not applicable (leave-on products without UV exposure)
Category 11B	Tights with moisturizers. Scented socks, gloves. Facial tissues (dry tissues). Napkins. Paper towels. Wheat bags. Facial masks (paper/protective) e.g. surgical masks not used as medical device. Fertilizers, solid (pellet or powder).	NO	Applicable (leave-or products)
Category 12	Candles of all types (including encased). Laundry detergents for machine wash with minimal skin contact (e.g. Liquid tabs, pods). Automated air fresheners and fragrancing of all types (concentrated aerosol with metered doses (range 0.05-0.5mL/spray), plug-ins, closed systems, solid substrate, membrane delivery, electrical, powders, fragrancing sachets, incense, liquid refills (cartridge), air freshening crystals). Air delivery systems. Cat litter. Cell phone cases. Deodorizers/maskers not intended for skin contact (e.g. fabric drying machine deodorizers, carpet powders). Fuels. Insecticides (e.g. mosquito coil, paper, electrical, for clothing) excluding aerosols/sprays. Joss sticks or incense sticks. Dish wash detergent and deodorizers – for machine wash. Olfactive board games. Paints. Plastic articles (excluding toys). Scratch and sniff. Scent pack. Scent delivery system (using dry air technology). Shoe polishes. Rim blocks (Toilet).	NO	Not applicable (non skin contact products)

Material Safety Data Sheet

EU Regulation: 1907/2006

SECTION 1: IDENTIFICATION OF	THE SUBSTANCE	MIXTURE	AND OF THE COMPANY	UNDERTAKING	
1.1 Product Identification					
PRODUCT NAME	Fir needle, Essential	OIL			
BIOLOGICAL DEFINITION	FIR NEEDLE OIL IS THE	VOLATILE OIL (OBTAINED FROM THE NEEDLES OF TH	e Abies sibirica, Pir	NACEAE.
INCI NAME	Abies Sibirica Oil				
Synonyms & Trade Names	N/A				
INTERNAL PRODUCT CODE	OEFIRNEED				
CAS-No	91697-89-1	EC No.	249-351-9	EINECS No.	249-351-9
			1	<u> </u>	
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
COMPANY ADDRESS	Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate, Fordingbridge, SP6 1PA				
EMAIL	technical@madarcorporation.co.uk				
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
EMERGENCY CONTACTS	01425 655 555				

	THE FULL TEXT FOR ALL HAZARD STATEMENTS IS DISPLAYED IN SECTION 16.			
	DANGEROUS FOR THE ENVIRONMENT PHYSICAL AND CHEMICAL HAZARDS : FLAM. LIQ. 3 (H226)			
CLASSIFICATION (EU1272/2008)	HUMAN HEALTH: ASP. TOX. 1 - H304 SKIN IRRIT. 2 (H315), SKIN SENS. 1B (H317), EYE IRRIT. 2 (H319) ENVIRONMENT: AQUATIC ACUTE 1 (H400), AQUATIC CHRONIC 1 (H410)			
2.2 LABEL ELEMENTS	Label in accordance with Regulation (EC) No 1272/2008.			
GHS LABEL	GHS02 GHS07 GHS08 GHS09 GHS09			
Signal Word	GHS02 GHS07 GHS08 GHS09 DANGER.			
Contains	A-PINENE, B-PINENE, D-LIMONENE, CAMPHENE			
	H226 FLAMMABLE LIQUID AND VAPOUR.			
	H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H315 CAUSES SKIN IRRITATION.			
HAZARDS STATEMENT	H317 MAY CAUSES SNIN IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION.			
	H319 CAUSES SERIOUS EYE IRRITATION.			
	H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.			
	P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. NO SMOKING.			
	P273 AVOID RELEASE TO THE ENVIRONMENT. P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING AND EYE/FACE PROTECTION.			
	P301+P310 IF SWALLOWED: IMMEDIATELY CALL & POISON CENTER/DOCTOR.			
	P302+P352 IF ON SKIN: WASH WITH PLENTY OF WATER.			
PRECAUTIONARY STATEMENTS	· · · · · · · · · · · · · · · · · · ·			
	PRESENT AND EASY TO DO. CONTINUE RINSING. P331 DO NOT INDUCE VOMITING.			
	P331 DO NOT INDUCE VOMITING. P370+P378 IN CASE OF FIRE: USE CARBON DIOXIDE OR POWDER EXTINGUISHER TO EXTINGUISH.			
	P403+P235 STORE IN A WELL-VENTILATED PLACE. KEEP COOL.			
	P501 DISPOSE OF CONTENTS IN ACCORDANCE WITH LOCAL, STATE OR NATIONAL LEGISLATION.			
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	P264 WASH HANDS AND EXPOSED SKIN THOROUGHLY AFTER HANDLING.			
	SECTION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.			
2.3				
OTHER HAZARDS				
Adverse physio-chemical properties	COMBUSTIBLE BUT SHOULD NOT SELF-IGNITE.			
Adverse effects on human health	SKIN CONTACT MAY CAUSE IRRITATION/SENSITISATION.			
PBT OR VPVB ACCORDING TO ANNEX XIII	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.			
SECTION 3: COMPOSITION OF INGREDIEN	175			
SECTION 5. COM OSTION OF INGREDIEN				
3.2 SUBSTANCES	18-30% D-LIMONENE CAS-NO.: 5989-27-5 EC NO.: 227-813-5 Classification (EC 1272/2008) Flam. Liq. 3 – H226, ASP Tox. 1 – H304, Skin Irrit 2 – H315, Skin Sens. 1 – H317 Aquatic Acute 1 – H400, Aquatic Chronic 1 – H410			

15-25% CAMPHENE CAS-NO.: 79-92-5 EC NO.:201-234-8 Classification (EC 1272/2008) Flam. Sol. 1 – H228, Eye Irrit 2 – H319, Aquatic Acute 1 – H400, Aquatic Chronic 1- H410
15-25% ALPHA-PINENE CAS-NO.: 80-56-8 EC NO.: 201-291-9 Classification (EC 1272/2008) Flam. Liq. 3 - H226, Acute Tox. 4- H302, ASP. Tox. 1- H304, Skin Irrit. 2- H315, Skin Sens. 1- H317, Aquatic Acute 1- H400, Aquatic Chronic 1- H410
1-7% DELTA-3-CARENE CAS-NO.: 13466-78-9 EC NO.: 236-719-3 Classification (EC 1272/2008) Flam. Liq. 3 - H226, ASP. Tox. 1- H304, Skin Irrit. 2 H315, Skin Sens. 1- H317 Aquatic Acute 1- H400, Aquatic Chronic 1 H410
2-6% BETA-PINENE CAS-NO.: 127-91-3 EC NO.: 204-872-5 Classification (EC 1272/2008) Flam. Liq. 3 - H226, ASp. Tox. 1 - H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410
0.5-3% TERPINOLENE CAS-NO.: 586-62-9 EC NO.: 209-578-0 Classification (EC 1272/2008) ASP. Tox. 1- H304, Skin Sens. 1B- H317, Aquatic Acute 1- H400, Aquatic Chronic 1- H410

SECTION 4: FIRST AID MEASURES	
4.1	
DESCRIPTION OF FIRST AID MEASURES	
GENERAL INFORMATION	ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.
INHALATION	GET MEDICAL ATTENTION IMMEDIATELY. REMOVE FROM EXPOSURE SITE TO FRESH AIR, KEEP AT REST, AND OBTAIN MEDICAL ATTENTION.
INGESTION	GET MEDICAL ATTENTION IMMEDIATELY. RINSE MOUTH WITH WATER AND OBTAIN MEDICAL ATTENTION. IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER.
SKIN CONTACT	REMOVE CONTAMINATED CLOTHES. WASH THOROUGHLY WITH SOAP AND WATER. CONTACT PHYSICIAN IF IRRITATION PERSISTS.
EYE CONTACT	FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. CONTACT PHYSICIAN IF SYMPTOMS PERSIST.
4.2 Most important symptoms & effects (Acute & Delayed)	OBSERVE RISK OF ASPIRATION IF VOMITING OCCURS.
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	TREAT SYMPTOMATICALLY.

SECTION 5: FIRE FIGHTING MEASURES	
5.1 Extinguishing material	FOAM, CO2, DRY CHEMICAL POWDER.
5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	IN CASE OF INSUFFICIENT VENTILATION AND/OR IN USE, MAY FORM FLAMMABLE/EXPLOSIVE VAPOUR-AIR MIXTURE. PLACES WHICH ARE NOT VENTILATED, E.G. UNVENTILATED BELOW GROUND LEVEL AREAS SUCH AS TRENCHES, CONDUITS AND SHAFTS, ARE PARTICULARLY PRONE TO THE PRESENCE OF FLAMMABLE SUBSTANCES OR MIXTURES. HAZARDOUS COMBUSTION PRODUCTS - CARBON MONOXIDE (CO), CARBON DIOXIDE (CO2)
5.3 Advice for fire-fighters	IN CASE OF FIRE AND/OR EXPLOSION; DO NOT BREATHE FUMES. CO-ORDINATE FIREFIGHTING MEASURES TO THE FIRE SURROUNDINGS. DO NOT ALLOW FIREFIGHTING WATER TO ENTER DRAINS OR WATER COURSES. COLLECT CONTAMINATED FIREFIGHTING WATER SEPARATELY. FIGHT FIRE WITH NORMAL PRECAUTIONS FROM A REASONABLE DISTANCE.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions	ENSURE ADEQUATE VENTILATION OF THE WORKING AREA, EVACUATE PERSONNEL TO SAFE AREA, WEAR SUITABLE PROTECTIVE EQUIPMENT. NO SMOKING, SPARKS, FLAMES OR OTHER SOURCES OF IGNITION NEAR SPILLAGE. AVOID CONTACT WITH SKIN, EYES AND CLOTHING.	
6.2 ENVIRONMENTAL PRECAUTIONS	DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES.	
6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING UP	Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.	

	REFER & CONSIDER SECTIONS 5, 8, 10 & 13.	
REFERENCES TO OTHER SECTIONS		
SECTION 7: HANDLING & STORAGE		
7.1 Precautions for safe-handling	Use local and general ventilation. Use only in well-ventilated areas. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air. Do not breathe gas/fumes/vapour/spray. Wash hands after use. Do not eat, drink and smoke in work areas.	
7.2 Conditions for safe storage, including any incompatibilities	KEEP CONTAINER TIGHTLY CLOSED AND IN A WELL-VENTILATED PLACE. USE LOCAL AND GENERAL VENTILATION. STORE AT TEMPERATURES NOT EXCEEDING 25 °C. KEEP COOL. PROTECT FROM SUNLIGHT. KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. KEEP AWAY FROM HEAT, HOT SURFACES, SPARKS, OPEN FLAMES AND OTHER IGNITION SOURCES. NO SMOKING. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. PROTECT FROM SUNLIGHT. KEEP CONTAINER TIGHTLY CLOSED IN A COOL PLACE.	
7.3 Specific end use(s)	NO ADDITIONAL DATA AVAILABLE.	
SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION		
8.1 Control Parameters	NO DATA.	
EXPOSURE CONTROLS		
	Use protection goggles according to EN166.	
EYE PROTECTION HAND PROTECTION	Use solvent and acid resistant protection gloves according to EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.	
	Use solvent and acid resistant protection gloves according to EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Take recovery periods for skin regeneration. Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) increase ventilation of the area with local exhaust ventilation. B) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also	
HAND PROTECTION	Use solvent and acid resistant protection gloves according to EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Take recovery periods for skin regeneration. Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. B) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also Refer to Sections 2 and 7.	
HAND PROTECTION RESPIRATORY EQUIPMENT	Use solvent and acid resistant protection gloves according to EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Take recovery periods for skin regeneration. Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. B) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also refer to Sections 2 and 7. Good personal hygiene practices are always advisable, especially when working with chemicals / oils.	
HAND PROTECTION RESPIRATORY EQUIPMENT HYGIENE MEASURES	Use solvent and acid resistant protection gloves according to EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Take recovery periods for skin regeneration. Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) increase ventilation of the area with local exhaust ventilation. B) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also refer to Sections 2 and 7. Good personal hygiene practices are always advisable, especially when working with chemicals / oils. None.	
HAND PROTECTION RESPIRATORY EQUIPMENT HYGIENE MEASURES ENGINEERING MEASURES	Use solvent and acid resistant protection gloves according to EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Take recovery periods for skin regeneration. Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. B) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also refer to Sections 2 and 7. Good personal hygiene practices are always advisable, especially when working with chemicals / oils. None.	
HAND PROTECTION RESPIRATORY EQUIPMENT HYGIENE MEASURES ENGINEERING MEASURES SKIN PROTECTION	Use solvent and acid resistant protection gloves according to EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Take recovery periods for skin regeneration. Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. B) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also refer to Sections 2 and 7. Good personal hygiene practices are always advisable, especially when working with chemicals / oils. None. Wear protective clothing to reduce the risk of skin and eye contact. Use personal protection according to Directive 89/686/EEC.	
HAND PROTECTION RESPIRATORY EQUIPMENT HYGIENE MEASURES ENGINEERING MEASURES SKIN PROTECTION PERSONAL PROTECTION	Use solvent and acid resistant protection gloves according to EN 374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Take recovery periods for skin regeneration. Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. B) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also refer to Sections 2 and 7. Good personal hygiene practices are always advisable, especially when working with chemicals / oils. None.	

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES		
9.1 Physical & Chemical Properties		
Appearance	Liquid	
COLOUR	Colourless – Slightly Yellow	
Odour	CHARACTERISTIC.	
RELATIVE DENSITY	Approx. 0.886 @ 20°C	
FLASH POINT (°C)	42°C	
Refractive Index @ 20 °C	Approx. 1.470 @ 20°C	
Solubility in water @ 20 °C	INSOLUBLE IN WATER. SOLUBLE IN ETHANOL AT A RATIO OF 1:5	
9.2 Other Information	NO ADDITIONAL DATA AVAILABLE.	
SECTION 10: STABILITY & REACTIVITY		
10.1	Presents no significant reactivity hazards, by itself or in contact with water. Stable under normal	
REACTIVITY	TEMPERATURE AND STORAGE CONDITIONS AND RECOMMENDED USE. IF HEATED, THERE IS A RISK OF IGNITION.	
10.2 Chemical stability	Stable under suggested storage conditions (<15 $^{\circ}$ C).	
10.3 Possibility of hazardous reactions	No.	
	KEEP AWAY FROM HEAT, HOT SURFACES, SPARKS, OPEN FLAMES AND OTHER IGNITION SOURCES. NO SMOKING.	
	TEMPERATURES HIGHER THAN AMBIENT TEMPERATURE SUPPORT THE TRANSITION FROM LIQUID PHASE TO VAPOUR AND MAY	
10.4	GENERATE EXPLOSIVE ATMOSPHERE. PREVENT STORING THE PRODUCT IN OPEN CONTAINERS FOR LONGER PERIODS, NOT TO	
CONDITIONS TO AVOID	SUPPORT THE FORMATION OF PEROXIDES AND PRODUCT DETERIORATION.	
	Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take	
	PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE.	
10.5 Incompatible materials	Avoid: Acids, Bases, Oxidisers, Reducing agents	
10.6	REASONABLY ANTICIPATED HAZARDOUS DECOMPOSITION PRODUCTS PRODUCED AS A RESULT OF USE, STORAGE, SPILL AND	

SECTION 11: TOXICOLOGICAL INFORMATION	
11.1 Toxicological effects	
Αсυτε Τοχιςιτγ	NOT CLASSIFIED.
SKIN IRRITATION	Causes Serious Skin Irritation.
Eye damage or irritation	Causes Serious Eye Irritation.
R ESPIRATORY OR SKIN SENSITIVITY	MAY CAUSE AN ALLERGIC SKIN REACTION.
GERM CELL MUTAGENICITY	NOT CLASSIFIED.
Carcinogenicity	NOT CLASSIFIED.

R EPRODUCTIVE TOXICITY	NOT CLASSIFIED.
STOT – SINGLE EXPOSURE	NOT CLASSIFIED.
STOT – REPEATED EXPOSURE	NOT CLASSIFIED.
Aspiration hazard	MAY BE FATAL IF SWALLOWED OR ENTERS AIRWAYS.
Other information	NO ADDITIONAL DATA AVAILABLE.
SECTION 12: ECOLOGICAL INFORMATION	
	1
12.1 Toxicity 12.2	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS
PERSISTENCE & DEGRADABILITY 12.3	NO ADDITIONAL DATA AVAILABLE.
BIO- ACCUMULATIVE POTENTIAL	NO ADDITIONAL DATA AVAILABLE.
12.4 MOBILITY IN SOIL	NO ADDITIONAL DATA AVAILABLE.
12.5 RESULTS OF PBT & VPVB ASSESSMENT	THIS SUBSTANCE DOES NOT MEET THE PBT/VPVB CRITERIA OF REACH, ANNEX XIII.
12.6 Other adverse effects	DO NOT ALLOW PRODUCT TO ENTER STREAMS, SEWERS OR OTHER WATERWAYS.
SECTION 13: DISPOSAL INFORMATION	
13.1 Waste treatment methods	ALWAYS RECOVER SPILLED PRODUCT. DISCARD WASTE MATERIAL WITH AUTHORIZED WASTE MANAGEMENT SERVICES. ACT IN ACCORDANCE WITH LOCAL & NATIONAL WASTE REGULATIONS.
SECTION 14: TRANSPORT INFORMATION	
14.1 Transport Information	
UN NUMBER	ROAD: 1272 RAIL: 1272 AIR: 1272
14.2 UN Shipping Name	PINE OIL
14.3 TRANSPORT HAZARD CLASS(ES)	ADR/RID/ADN CLASS: 3 FLAMMABLE LIQUID. IMDG CLASS: 3 FLAMMABLE LIQUID. ICAO CLASS/DIVISION: 3 FLAMMABLE LIQUID. TRANSPORT LABELS
14.4 Packing Group	ADR/RID/ADN PACKING GROUP III IMDG PACKING GROUP III ICAO PACKING GROUP III
14.5 Enviromental Hazards	Environmentally Hazardous Substance/Marine Pollutant

14.6 Special precautions for user	SEE SECTIONS 6 TO 8.
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	PACKED AND TRANSFERRED ACCORDING TO TRANSPORT REGULATIONS.
SECTION 15: REGULATORY INFORMATION	
15.1 Product specific safety, health & environmental regulations & legislation	
EU Directives	REGULATION (EC) NO 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 [™] DECEMBER 2006. CONCERNING THE REGISTRATION, EVALUATION, AUTHORIZATION & RESTRICTION OF CHEMICALS (REACH), ESTABLISHING A EUROPEAN CHEMICALS AGENCY, AMENDING DIRECTIVE 1999/45/EC and REPEALING COUNCIL REGULATION (EEC) NO793/93 & COMMISSION REGULATION (EC) NO1488/94 AS WELL AS COUNCIL DIRECTIVE 76/769/EEC & COMMISSION DIRECTIVE 91/155/ECC, 93/67/ECC, 93/105/EEC & 2000/21/EC (INCLUDING AMENDMENTS).
STATUTORY INSTRUMENTS	The Chemicals (Hazard Information & Packaging for Supply Regulations 2009 (S.I.2009 No 716).
Approved Code of Practice	CLASSIFICATION & LABELLING OF SUBSTANCES & PREPARATIONS DANGEROUS FOR SUPPLY. SAFETY DATA SHEETS FOR SUBSTANCES & PREPARATIONS.
Guidance Notes	WORKPLACE EXPOSURE LIMITS EH40. CHIP FOR EVERYONE HSG 108.
15.2 Chemical Safety Assessment	-

SECTION 16: OTHER INFORMATION	
	H226 FLAMMABLE LIQUID AND VAPOUR.
	H228 FLAMMABLE SOLID
	H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.
	H315 CAUSES SKIN IRRITATION.
HAZARD AND/ OR PRECAUTIONARY STATEMENTS IN FULL	H317 MAY CAUSE AN ALLERGIC SKIN REACTION.
	H319 CAUSES SERIOUS EYE IRRITATION.
	H400 VERY TOXIC TO AQUATIC LIFE.
	H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
	H411 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
TRAINING INSTRUCTIONS: REFER TO POSSIBLE HAZARD BEFORE USE OF THIS PRODUCT. ABBREVIATIONS & ACRONYMS:	
MSDS	MATERIAL SAFETY DATA SHEET.
INCI	INTERNATIONAL NOMENCLATURE OF COSMETIC INGREDIENTS.
CAS	CHEMICAL ABSTRACT SERVICE.
IMDG	International Maritime code for Dangerous Goods.
ADR	Accord European sur le transport des merchandises Dangereuses par Route (European
	Agreement concerning the international Carriage of Dangerous goods by Road).
RID	International Carriage of Dangerous Goods by Rail.

ICAO	International Civil Aviation Organization.
ADN	International Carriage of Dangerous Goods by Inland Waterways.
GHS	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION & LABELLING OF CHEMICALS.
TREM CARD	TRANSPORT EMERGENCY CARD.
STOT	Specific Target Organ Toxicity.

DOCUMENTATION REVISION

DATE	CHANGE DESCRIPTION
10 [™] April 2018	DATA LAUNCH
DECEMBER 2020	Review

SPECIFICATION SHEET

PRODUCT NAME: FIR NEEDLE, ESSENTIAL OIL
PRODUCT INCI: ABIES SIBIRICA OIL
PRODUCT CODE: OEFIRENEED
CAS NUMBER: 91697-89-1
EINECS NUMBER: 249-351-9
Shelf Life / Best Before: 24 months

ANALYTICAL DETAILS	RANGE
Appearance	LIQUID
Colour	COLORLESS – PALE YELLOW
Odour	CHARACTERISTIC
SPECIFIC GRAVITY @ 20°C	0.875 – 0.898
Refractive Index @ 20°C	1.460 – 1.480
OPTICAL ROTATION (°C)	-60.0 то -38.0

STORAGE CONDITIONS

STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

DOCUMENTATION REVIEW DATE:

October 2020

Vegetarian & Vegan Suitability Statement

PRODUCT NAME: Sesame Seed Refined

MADAR Corporation Limited can confirm that the above listed product has not been tested in animals and does not contain dairy or any other animal product, by product or derivative and is therefore suitable for vegetarian and vegan use.

20/09/2022