### **CERTIFICATE OF ANALYSIS**

#### PRODUCT NAME: **SPRUCE BLACK, ESSENTIAL OIL** Batch Number: 4514810

PRODUCT INCI: PICEA MARIANA LEAF

PRODUCT CODE: OESPRUBLAC

CAS NUMBER: 91722-19-9

EINECS NUMBER: 294-420-3

MANUFACTURING METHOD: STEAM DISTILLATION

Best Before End: August 2026

ANALYTICAL DETAILS	Range	RESULTS
Appearance	Liquid	-
Colour	COLOURLESS - YELLOW	-
Odour	CHARACTERISTIC	-
Specific Gravity @ 20°C	0.875 – 0.898	0.891
Refractive Index @ 20°C	1.460 - 1.480	1.470
OPTICAL ROTATION (°C)	-60.0 то -38.0	-45.80

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

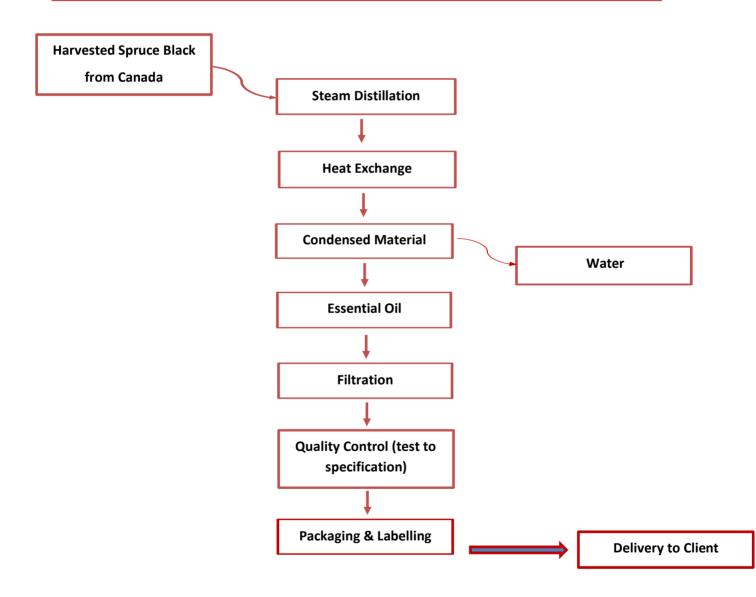
### Allergen Declaration:

RODUCT NAME:	Spruce Black, Essential			
INCI:	Picea Mariana Leaf			
The fai	COSMETIC ALLERGENS			
	iowing is from the 7th amenament of the cosmetic airective of the European Union Annex III.			
ex Illa Reference:		CAS NUMBER:	TOTAL ALLERGEN INCLUSION (%):	
67	AMYL CINNAMAL	122-40-7	0.00	
68	BENZYL ALCOHOL	100-51-6	0.00	
69	CINNAMYL ALCOHOL	104-54-1	0.00	
70	CITRAL	5392-40-5	0.00	
71	EUGENOL	97-53-0	0.00	
72	HYDROXY-CITRONELLAL	107-75-5	0.00	
73	ISOEUGENOL	97-54-1	0.00	
74	AMYLCIN-NAMYL ALCOHOL	101-85-9	0.00	
75	BENZYL SALICYLATE	118-58-1	0.00	
76	CINNAMAL	104-55-2	0.00	
77	COUMARIN	91-64-5	0.00	
78	GERANIOL	106-24-1	0.00	
79	HYDROXY- METHYLPENTYLCYCLOHEXENECARBOXALDEHYDE	31906-04-4	0.00	
80	ANISE ALCOHOL	105-13-5	0.00	
81	BENZYL CINNAMATE	103-41-3	0.00	
82	FARNESOL	4602-84-0	0.00	
83	BUTYLPHENYL METHYLPROPIONAL	80-54-6	0.00	
84	LINALOOL	78-70-6	0.00	
85	BENZYL BENZOATE	120-51-4	0.00	
86	CITRONELLOL	106-22-9	0.00	
87	HEXYL CINNAM-ALDEHYDE	101-86-0	0.00	
88	LIMONENE	5989-27-5	20.0 - 30.0	
89	METHYL HEPTIN CARBONATE	111-12-6	0.00	
90	ALPHA-ISOMETHYL IONONE	127-51-5	0.00	
91	EVERNIA PRUNASTRI EXTRACT	90028-68-5	0.00	
92	EVERNIA FURFURACEA EXTRACT	90028-67-4	0.00	
52	EVENINA FOR ORACLA EXTRACT	50020-07-4	0.00	
Nowing is from the commission	FOOD ALLERGENS n directive 2007/68/EC of 27th November 2007 amending Annex Ilia to Directive 200/13/EC of the European Parlic	mont & Council with manufe to consilie food in	and in tr	
x Illa Reference:	n unetuwe 2007/06/st of 27th November 2007 unterlang whitek no to Direttive 200/13/st of the suropean Pank	PRESENT IN PRODUCT:	CONTAMINATION PRESENCE:	FACTORY PRESENCE:
1 111 x eference:	CEREALS ( CONTAINING GLUTEN )	NO	NO	YES
2	CRUSTACEANS	NO	NO	NO
2	EGGS	NO	NO	NO
3	FISH	NO	NO	NO
4				
5	PEANUTS	NO	NO	YES
6	SOYA	NO	NO	YES
/	MILK	NO	NO	YES
8	NUTS	NO	NO	YES
9	CELERY & CELERIAC	NO	NO	NO
10	MUSTARD	NO	NO	YES
11	SESAME	NO	NO	YES
12	SULPHUR DIOXIDE & SULPHITES	NO	NO	NO
13	LUPIN	NO	NO	NO
13	MOLLUSC	NO	NO	NO

Composition Statement & Manufacturing Flow Chart:

#### Spruce Black, Essential Oil

INCI Name	% Inclusion	CAS Number
Picea Mariana Leaf	100	91722-19-9



### **GMO Statement**

PRODUCT NAME: SPRUCE BLACK

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

06/03/2019

### IFRA STATEMENT

PRODUCT NAME: SPRUCE BLACK, ESSENTIAL OIL

PRODUCT INCI: PICEA MARIANA LEAF OIL

MADAR CORPORATION 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  $50^{\text{TH}}$  Amendment of the IFRA Code of Practice:

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

#### Additional comments:

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

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	No	Applicable (leave-on products)
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-off 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-off 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-off 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

<b>SECTION 1: IDENTIFICATION OF</b>	THE SUBSTANCE	MIXTURE	AND OF THE COMPANY	UNDERTAKING	
1.1 PRODUCT IDENTIFICATION					
Product Name	SPRUCE BLACK, ESSEN	TIAL OIL			
BIOLOGICAL DEFINITION	Picea Mariana Leaf	OIL IS AN ESSE	NTIAL OIL OBTAINED FROM THE LEAN	ves of the spruce, I	Picea mariana, Pinaceae.
INCI NAME	Picea Mariana Leaf	Oil.			
Synonyms & Trade Names					
INTERNAL PRODUCT CODE	OESPRUBLAC				
CAS-No	91722-19-9	EC No.	294-420-3	EINECS No.	294-420-3
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
Company Address	MADAR CORPORATION LIMITED 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA				
EMAIL	SALES@MADARCC	RPORATION	.CO.UK		
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
Emergency Contacts	01425 655555				

2.1 Classification of the substance or mixture	THE FULL TEXT FOR ALL HAZARD STATEMENTS IS DISPLAYED IN SECTION 16.
CLASSIFICATION (67/548/EEC)	NO ADDITIONAL DATA AVAILABLE.
CLASSIFICATION (EU1272/2008)	Flam. Liq. 3 (H226) ASP. Tox. 1 (H304) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aqu. Chron. 1 (H410)
2.2 LABEL ELEMENTS	LABEL IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.
GHS LABEL	GHS02 GHS07 GHS08 GHS09 GHS09
Signal Word	DANGER.
Contains	Delta-3-Carene, alpha-Pinene, beta-Pinene, Limonene, Camphene.
HAZARDS STATEMENT	H226FLAMMABLE LIQUID AND VAPOUR.H304May be fatal if swallowed and enters airways.H319Causes serious eye irritation.H317May cause an allergic skin reaction.H410Very toxic to aquatic life with long lasting effects.
Precautionary Statements	P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES NO SMOKING.   P241 USE EXPLOSION-PROOF ELECTRICAL/VENTILATING/LIGHTING/EQUIPMENT.   P301+P310 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER/ DOCTOR.   P303+P361+P353 IF ON SKIN (or hair): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN   WITH WATER/SHOWER.   P405 STORE LOCKED UP.   P501 DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL   REGULATIONS. REGULATIONS.
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	-
	Section 16 (Other Information): Risk & Safety phrases in full.
2.3 Other Hazards	
Adverse physio-chemical properties	ΝΟ ΔΑΤΑ
Adverse effects on human health	NO DATA
PBT OR VPVB ACCORDING TO ANNEX XIII	ΝΟ ΔΑΤΑ

	<b>20-30% LIMONENE</b> CAS-NO.: 5989-27-5 EC NO.: 227-813-5 Classification (EC 1272/2008) Flam. Liq. 3 – H226, Skin Irrit 2 – H315 ASP Tox. 1 – H304, Skin Sens. 1 – H317 Aquatic Acute 1 – H400, Aquatic Chronic 1 – H410
	<b>20-25% Camphene</b> CAS-No 79-92-5, EC 201-234-8 Classification (EC 1272/2008); Flam. Sol. 1 – H228, Eye Irrit 2 – H319, Aquatic Acute 1 – H400
3.2 Mixtures	<b>10-20% Alpha-Pinene</b> CAS-No.: 80-56-8 EC No.: 201-291-9 Classification (EC 1272/2008) Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Asp. Tox. 1 - H304
	<b>2-4% BETA-PINENE</b> CAS. NO: 127-91-3 EC NO: 204-872-5 Classification (EC 1272/2008); Danger, Flam. Liq. 3 – H226, Skin Sens. 1 – H317 , ASP Tox. 1 – H304, Aquatic Chronic 1 – H410
	<b>1-4% delta-3-Carene</b> CAS-No.: 13466-78-9 EC No.: 236-719-3 Classification (EC 1272/2008) Danger Flam. Liq. 3, H226; ASP. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Sens. 1, H317

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.		
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)	Inhalation May cause coughing and difficulties in breathing.   Ingestion Irritating to the respiratory tract and may cause damage to the central nervous system.   Skin contact Toxic in contact with skin.   Eye contact May cause eye irritation.		
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	NONE EXPECTED, SEE SECTION 4.1 FOR FURTHER INFORMATION.		

#### **SECTION 5: FIRE FIGHTING MEASURES**

5.1 Extinguishing material	FOAM, CO2, DRY CHEMICAL POWDER.
5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	BURNING PRODUCES IRRITATING, TOXIC AND OBNOXIOUS FUMES
5.3	SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:
Advice for fire-fighters	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING.

#### 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	Do not discharge into drains, water courses or onto the ground. Dispose of in line with Local authority
ENVIRONMENTAL PRECAUTIONS	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.
6.4	REFER & CONSIDER SECTION 8.
REFERENCES TO OTHER SECTIONS	REFER & CONSIDER SECTION 13.

#### **SECTION 7: HANDLING & STORAGE**

7.1 Precautions for safe-handling	HANDLE IN ACCORDANCE WITH GOOD HYGIENE AND SAFETY PRACTICE. KEEP AWAY FROM HEAT, SPARKS, OPEN FLAMES AND HOT SURFACES NO SMOKING. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. USE IN ACCORDANCE WITH GOOD MANUFACTURING AND INDUSTRIAL HYGIENE PRACTICES. USE IN AREAS WITH ADEQUATE VENTILATION DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.	
7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP THE PRODUCT CONTAINER TIGHTLY CLOSED, IN A DRY, VENTILATED AREA. KEEP AWAY FROM POTENTIAL SOURCES OF IGNITION AND PROTECTED FROM LIGHT. MAINTAIN LIMITED CONTACT WITH OXYGEN.	
7.3 Specific end use(s)	NO DATA.	
SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION		
8.1 Control Parameters	NO DATA.	
8.2 EXPOSURE CONTROLS		
	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.	
HAND PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.	
RESPIRATORY EQUIPMENT	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	
Hygiene Measures	REFER TO SECTIONS 2 AND 7.	
	GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.	
Personal Protection	WEAR PROTECTIVE CLOTHING TO REDUCE THE RISK OF SKIN AND EYE CONTACT.	
OTHER PROTECTION	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES.	
	WEAR SUITABLE PROTECTION TO AVOID CONTACT WITH SKIN AND EYES. DO NOT INHALE VAPOURS.	
PROCESS CONDITIONS ENVIROMENTAL EXPOSURE CONTROLS	ENSURE AREA IS WELL VENTILATED. AVOID VAPOUR INHALATION. SAFETY SHOWER & EYE BATH.	
ENVIROMENTAL EXPOSURE CONTROLS	AVOID DISCHARGING INTO DRAINAGE WATER.	
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES		
9.1 Physical & Chemical Properties		
Appearance	LIQUID	
Colour	Clear - yellow liquid	
Odour	CHARACTERISTIC	
RELATIVE DENSITY	Approx 0.886 @ 20°C	

FLASH POINT (°C)	42°C
<b>R</b> EFRACTIVE INDEX @ 20 °C	Approx. 1.470 @ 20°C
Solubility in water @ 20 °C	INSOLUBLE IN WATER.
9.2 Other Information	NO DATA.
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.
10.2 Chemical stability	Stable under suggested storage conditions (<15 $^{\circ}$ C).
10.3 Possibility of hazardous reactions	No.
10.4 CONDITIONS TO AVOID	Storage at high temperatures. Do not store above $15^{\circ}$ C.
10.5 Incompatible materials	P.V.C
10.6	THIS PRODUCT DOES NOT DECOMPOSE UNDER NORMAL CONDITIONS. UNDER FIRE CONDITIONS THE PRODUCT WILL PRODUCE
HAZARDOUS DECOMPOSITION PRODUCTS	A MIXTURE OF IRRITATING FUMES & SMOKE & CARBON MONOXIDE.

#### SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Toxicological effects	
Αсите Τοχιςπγ	Acute toxicity LD50 (oral) in mg/kg: > 5000
	LD50 (DERMAL) IN MG/KG: > 5000
Skin irritation	MAY CAUSE AN ALLERGIC SKIN REACTION.
Eye damage or irritation	NOT CLASSIFIED AS IRRITATING TO THE EYE (SOURCE CSR)
RESPIRATORY OR SKIN SENSITIVITY	NO DATA.
GERM CELL MUTAGENICITY	NEGATIVE. (SOURCE CSR).
Carcinogenicity	NOT APPLICABLE.
REPRODUCTIVE TOXICITY	NOT APPLICABLE.
STOT – SINGLE EXPOSURE	NOT APPLICABLE.
STOT – REPEATED EXPOSURE	NOT APPLICABLE.
ASPIRATION HAZARD	NO DATA.
Other Information	NO DATA.

#### **SECTION 12: ECOLOGICAL INFORMATION**

12.1	ADOPT GOOD WORKING PRACTICES, SO THAT THE PRODUCT IS NOT RELEASED INTO THE ENVIRONMENT.
Τοχιςιτγ	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
12.2	To be considered as readily biodegradable based on its ready biodegradability. Oil does not
PERSISTENCE & DEGRADABILITY	FULFIL THE CRITERIA FOR PERSISTENCE.
12.3 BIO- ACCUMULATIVE POTENTIAL	BIO-ACCUMALATION POTENTIAL
12.4 Mobility in soil	Considered as a readily biodegradable NCS. Based on the ready biodegradability of the NCS, simulation tests in surface water, sediment and soil are not required in accordance
10.5	WITH EFFECTS.
	LIST OF SUBSTANCES DANGEROUS FOR THE ENVIRONMENT AND CORRESPONDING CLASSIFICATION:
RESULTS OF PBT & VPVB ASSESSMENT	1% - 6% ALPHA PINENE CAS: 7785-26-4 EC: 232-077-3

	H410 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT. 1% - 5% LIMONENE CAS: 5989-27-5 EC: 227-813-5 H410 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT. FISH (P.PROMELAS): LC50 33MG/L - 96H DAPHIA MAGNA: EC50 69.6 MG/L - 48H VPVB SUBSTANCES: - PBT SUBSTANCES: NONE
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.

14.1		
TRANSPORT INFORMATION		
	ROAD: 1272	
UN NU	MBER RAIL: 1272	
	AIR: 1272	
1 4.2 UN Shipping Name	PINE OIL	
14.3 Transport hazard class(es)	ADR/RID/ADN CLASS: ADR HI NO: IMDG CLASS: ICAO CLASS/DIVISION: TRANSPORT LABELS	3: (F1) Flammable liquids 30 3: Flammable liquids 3: Flammable liquids
14.4	ADR/RID/ADN PACKING GROUP	
PACKING GROUP	ICAO PACKING GROUP	III
14.5 Enviromental Hazards	ENVIRONMENTALLY HAZARDOUS SUI	3STANCE/MARINE POLLUTANT
14.6		

14.7 Transport in bulk according to Annex II of MARPOL73/78 & the IBC code.	NO ADDITIONAL DATA.
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 <sup>™</sup> 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	
Hazard and/ or Precautionary Statements in full	H226Flammable liquid and vapour.H228Flammable Solid.H304May be fatal if swallowed and enters airways.H315Causes skin irritation.H317May cause an allergic skin reaction.H319Causes serious eye irritation.H410Very toxic to aquatic life with long lasting effects.H411Toxic 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 <sup>™</sup> April 2018	Data Launch

### **SPECIFICATION SHEET**

**PRODUCT NAME:** SPRUCE BLACK, ESSENTIAL OIL

PRODUCT INCI: PICEA MARIANA LEAF

PRODUCT CODE: OESPRUBLAC

CAS NUMBER: 91722-19-9 EINECS NUMBER: 294-420-3

MANUFACTURING METHOD: STEAM DISTILLATION

SHELF LIFE/BEST BEFORE END: 36 MONTHS

ANALYTICAL DETAILS	RANGE
Appearance	Liquid
Colour	Colourless - 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:

24<sup>th</sup> May 2018

### Vegetarian & Vegan Suitability Statement

PRODUCT NAME: SPRUCE BLACK

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.

November 2018