

CERTIFICATE OF ANALYSIS

PRODUCT NAME: SPRUCE BLACK, ESSENTIAL OIL

BATCH NUMBER: 4416108

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: NOVEMBER 2023

ANALYTICAL DETAILS	Range	RESULTS
Appearance	Liquid	-
Colour	Colourless - Yellow	-
Odour	Characteristic	-
Specific Gravity @ 20°C	0.875 – 0.898	0.893
Refractive Index @ 20°C	1.460 – 1.480	1.471
OPTICAL ROTATION (°C)	-60.0 то -38.0	-44.0

STORAGE CONDITIONS

STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

Allergen Declaration:

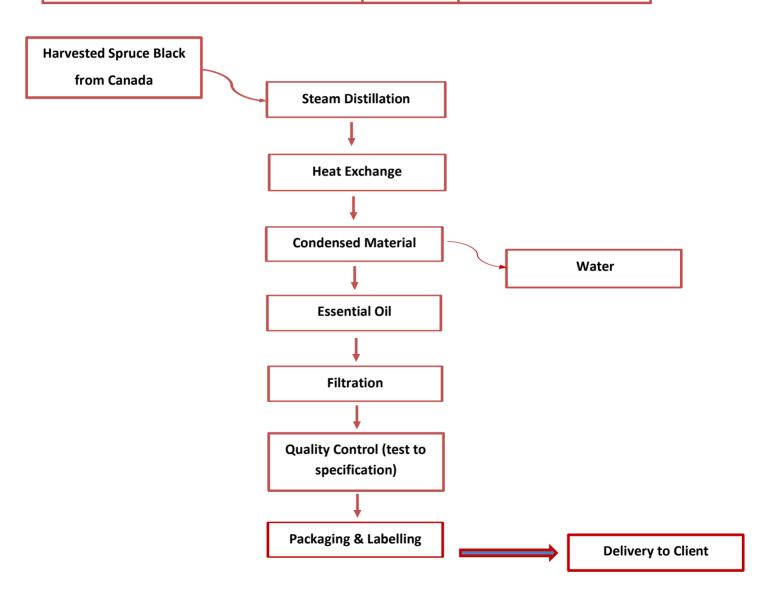
RODUCT NAME:	Spruce Black, Essential			
INCI:	Picea Mariana Leaf			
The Fol	COSMETIC ALLERGENS Illowing is from the 7th amendment of the cosmetic directive of the European Union Annex III.			
	towing 6 from the 7th unrenament of the cosmetic unreture of the European Orion Annex is.			
nex Illa Reference:	***************************************	CAS NUMBER:	TOTAL ALLERGEN INCLUSION (%):	
67	AMYL CINNAMAL	122-40-7	0.00	
68	BENZYL ALCOHOL	100-51-6	0.00	
69 70	CINNAMYL ALCOHOL	104-54-1	0.00	
	CITRAL	5392-40-5	0.00	
71	EUGENOL	97-53-0	0.00 0.00	
72	HYDROXY-CITRONELLAL	107-75-5		
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 77	CINNAMAL	104-55-2 91-64-5	0.00	
77 78	COUMARIN	91-64-5	0.00	
	GERANIOL		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	
ollowing is from the commission	FOOD ALLERGENS n directive 2007/68/EC of 27th November 2007 amending Annex lila to Directive 200/13/EC of the European Par	diament & Council with regards to specific food in	aredients.	
ex Illa Reference:		PRESENT IN PRODUCT:	CONTAMINATION PRESENCE:	FACTORY PRESENCE:
1	CEREALS (CONTAINING GLUTEN)	NO 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 NO	NO
10	MUSTARD	NO	NO	YES
11	SESAME	NO	NO NO	YES
12	SULPHUR DIOXIDE & SULPHITES	NO	NO NO	NO
13	LUPIN	NO NO	NO NO	NO
14	MOLLUSC	NO	NO NO	NO
	morrosc			



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

 \mbox{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
PRODUCT CODE: OESPRUBLAC
CAS NUMBER: 91722-19-9
EINECS NUMBER: 294-420-3
MANUFACTURING METHOD: STEAM DISTILLED

MADAR CERTIFY THAT THE ABOVE NAMED MATERIAL CONFORMS TO THE IFRA 48 CODE OF PRACTICE AND CONTAINS THE FOLLOWING RESTRICTED COMPONENTS THAT ARE LISTED IN THE 48TH AMENDMENT OF THE IFRA CODE OF PRACTICE:

Restricted Component	Cas No:	% Level in Product	IFRA Standard
Limonene	5989-27-5	20.0 – 30.0	Specification Stds.

IFRA Classes	% Maximum Use Level
Class 1	Not Restricted.
Class 2	Not Restricted.
Class 3A, 3B, 3C, 3D	Not Restricted.
Class 4A, 4B, 4C, 4D	Not Restricted.
Class 5	Not Restricted.
Class 6	Not Restricted.
Class 7A, 7B	Not Restricted.
Class 8A, 8B	Not Restricted.
Class 9A, 9B, 9C	Not Restricted.
Class 10A, 10B	Not Restricted.
Class 11	Not Restricted.

Finished product types	IFRA class
Toys; Lip Products of all types (solid and liquid lipsticks, balms, clear or colored etc)	Class 1
Deodorant and Antiperspirant products of all types (spray, stick, roll-on, under-arm and body etc)	Class 2

Hydroalcoholic products applied to recently shaved skin (EdT range)	Class 3.A
Hydroalcoholic products applied to recently shaved skin (fine fragrance range)	Class 3.B
ye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc) including eye cream. Men's Facial Creams and Balms	Class 3.C
ampons.	Class 3.D
Hydroalcoholic Products applied to unshaved skin (EdT range). Ingredients of Perfume Kits. Scent Strips for Hydroalcoholic Products, "scratch and sniff", other paper products not mentioned elsewhere for which skin exposure is only incidental (e.g. spectacle cleaning tissues).	Class 4.A
Hydroalcoholic Products applied to unshaved skin (Fine Fragrance range).	Class 4.B
Hair Styling Aids and Hair Sprays of all types (pumps, aerosol sprays, etc); Hair Deodorant. Body Creams, Oils, otions of all types (including baby creams, lotions, oils). Fragrance Compounds for Cosmetic Kits, Foot Care Products	Class 4.C
ragrancing Cream	Class 4.D
Women's Facial Creams/Facial Make-up (excluding eye cream); Facial Masks; Hand Cream Wipes or refreshing tissues for Face, Neck, Hands, Body.	Class 5
Mouthwash, Toothpaste.	Class 6
ntimate Wipes; Baby Wipes.	Class 7 A
nsect Repellent (intended to be applied to the skin).	Class 7 B
Make-up Removers of all types (not including face cleansers). Hair Styling Aids Non-Spray of all types (mousse, gels, eave-in conditioners etc). Nail Care. All Powders & Talcs (including baby powders and talcs).	Class 8
Liquid Soap, Bar Soap (toilet soap); Depilatory; Conditioner (rinse-off), Shampoos of all types (including baby shampoos). Face Cleansers of all types (washes, gels, scrubs, etc). Shaving Creams of all types (stick, gels, foams, etc). Body Washes of all types (including baby washes). Shower Gels of all types; Bath Gels, Foams, Mousses, Salts, Oils and other products added to bathwater	Class 9.A
Feminine hygiene pads / liners.	Class 9.B
Other' Aerosols (including air fresheners sprays but not including deodorant/antiperspirants, hair styling aids spray).	Class 9.C
Hand wash/Machine wash Laundry Detergents of all types (liquid, powder, tablet, etc) including Laundry Bleaches. Other Household Cleaning Products (fabric cleaners, soft surface cleaners, carpet cleaners etc). Dry Cleaning Kits. Fabric Softeners of all types including fabric softener sheets. Hand Dishwashing Detergent. Hard Surface Cleaners of all types (bathroom and kitchen cleansers, furniture polish etc). Shampoos for pets	Class 10.A
Diapers. Toilet seat wipes.	Class 10.B
All non-skin contact, including: Air Fresheners and fragrancing of all types (excluding aerosol products): plug-ins, solid substrate, membrane delivery; Toilet blocks; Joss Sticks, Incense; Insecticides (mosquito coil, paper, electrical, etcexcluding aerosols); Plastic articles (excluding toys); Candles; Fuels; Paints; Floor wax; Liquid refills for air fresheners (cartridge system)	Class 11.A
All incidental skin contact, including: Machine Dish wash Detergents and Deodorizers. Machine only Laundry Detergents (e.g. liquitabs). Deodorizers/Maskers (e.g. fabric drying machine deodorizers, carpet powder). Pot pourri, fragrancing sachets, iquid refills for air fresheners (non-cartridge systems), etc Shoe polishes; Cat Litter; Animal Sprays (excluding aerosols); Treated Textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics, tights with moisturizers); Odored Distilled Water (that can be added to steam irons).	Class 11.B



Material Safety Data Sheet

EU Regulation: 1907/2006

SECTION 1: IDENTIFICATION OF	THE SUBSTANCE	MIXTURE A	AND OF THE COMPANY/	UNDERTAKING	
1.1 PRODUCT IDENTIFICATION					
PRODUCT NAME	SPRUCE BLACK, ESSEN	TIAL OIL			
BIOLOGICAL DEFINITION	Picea Mariana Leaf	OIL IS AN ESSEI	NTIAL OIL OBTAINED FROM THE LEAN	VES OF THE SPRUCE, P	Picea mariana, Pinaceae.
INCI NAME	Picea Mariana Leaf	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 DATA SHEET					
COMPANY ADDRESS	MADAR CORPORATION LIMITED 19-20 SANDLEHEATH INDUSTRIAL ESTATE, FORDINGBRIDGE, HAMPSHIRE, SP6 1PA				
EMAIL	TECHNICAL@MADARCORPORATION.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 ABEL ELEMENTS	LABEL IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.			
GHS LABEL	GHS02 GHS07 GHS08 GHS09			
Signal Word	DANGER.			
CONTAINS	Delta-3-Carene, alpha-Pinene, beta-Pinene, Limonene, Camphene.			
Hazards Statement	H226 FLAMMABLE LIQUID AND VAPOUR. H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H319 CAUSES SERIOUS EYE IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. H410 VERY 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.			
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	-			
	SECTION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.			
2.3 Other Hazards				
ADVERSE PHYSIO-CHEMICAL PROPERTIES	NO DATA			
Adverse effects on human health	NO DATA			
PBT OR VPVB ACCORDING TO ANNEX XIII	NO DATA			

	20-30% Limonene 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
	20-25% CAMPHENE 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	10-20% ALPHA-PINENE 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
	2-4 % BETA-PINENE 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
	1-4% DELTA-3-CARENE 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 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.
6.4 REFERENCES TO OTHER SECTIONS	REFER & CONSIDER SECTION 8. 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



EYE PROTECTION	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 refer to Sections 2 and 7.	
HYGIENE MEASURES	GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.	
Engineering Measures	NONE.	
SKIN PROTECTION	WEAR PROTECTIVE CLOTHING TO REDUCE THE RISK OF SKIN AND EYE CONTACT.	
PERSONAL PROTECTION	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES.	
OTHER PROTECTION	WEAR SUITABLE PROTECTION TO AVOID CONTACT WITH SKIN AND EYES. DO NOT INHALE VAPOURS.	
Process Conditions	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	yellow — Red Brown
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.	
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°C).	
10.3 POSSIBILITY OF HAZARDOUS REACTIONS	No.	
10.4 CONDITIONS TO AVOID	Storage at high temperatures. Do not store above 1.5°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	
Acute Toxicity	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 TOXICITY	ADOPT GOOD WORKING PRACTICES, SO THAT THE PRODUCT IS NOT RELEASED INTO THE ENVIRONMENT. VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
12.2 PERSISTENCE & DEGRADABILITY	TO BE CONSIDERED AS READILY BIODEGRADABLE BASED ON ITS READY BIODEGRADABILITY. OIL DOES NOT 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 WITH EFFECTS.
12.5 RESULTS OF PBT & VPVB ASSESSMENT	LIST OF SUBSTANCES DANGEROUS FOR THE ENVIRONMENT AND CORRESPONDING CLASSIFICATION: 1% - 6% ALPHA PINENE CAS: 7785-26-4 EC: 232-077-3

12.6 OTHER ADVERSE EFFECTS	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 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 Num	ER RAIL: 1272	
	AIR: 1272	
14.2 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 EAC — 3Y HIN - 30	3: (F1) FLAMMABLE LIQUIDS 30 3: FLAMMABLE LIQUIDS 3: FLAMMABLE LIQUIDS
14.4 Packing Group	ADR/RID/ADN PACKING GROUP IMDG PACKING GROUP ICAO PACKING GROUP	
14.5 Enviromental Hazards	ENVIRONMENTALLY HAZARDOUS SU	
14.0 Special precautions for user	None.	

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 TH 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	H226 FLAMMABLE LIQUID AND VAPOUR. H228 FLAMMABLE SOLID. H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H315 CAUSES SKIN IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. H319 CAUSES SERIOUS EYE IRRITATION. H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. H411 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 TH 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: 24 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:

24TH 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