

Certificate of Analysis

Product Description: Spruce Hemlock Essential Oil INCI Name: Tsuga Canadensis Leaf Oil

EINECS Number: Not Listed CAS Number: Not Listed

Batch No: 4338302 Best Before End: October 2021

Analytical Details	Result
Appearance	Colourless to slightly yellow mobile liquid
Odour	Characteristic
Specific Gravity @ 20°C	0.890
Refractive Index @ 20°C	1.469
Optical Rotation	-44.1



Allergen Statement

Spruce Hemlock Essential Oil

INCI Name: Tsuga Canadensis Leaf Oil

From The 7th Amendment to the Cosmetic Directive of the European Union (EU) – Annex III 26 Fragrance Allergens

A	84-12-I	CAC N	Tabal Allaman Lad at a Land 1/0/)
Annex III Ref:	Material:	CAS No:	Total Allergen Inclusion Level (%)
67	AMYL CINNAMAL	122-40-7	0
68	BENZYL ALCOHOL	100-51-6	0
69	CINNAMYL ALCOHOL	104-54-1	0
70	CITRAL	5392-40-5	0
71	EUGENOL	97-53-0	0
72	HYDROXY-CITRONELLAL	107-75-5	0
73	ISOEUGENOL	97-54-1	0
74	AMYLCIN-NAMYL ALCOHOL	101-85-9	0
75	BENZYL SALICYLATE	118-58-1	0
76	CINNAMAL	104-55-2	0
77	COUMARIN	91-64-5	0
78	GERANIOL	106-24-1	0
79	HYDROXY- METHYLPENTYLCYCLOHEXENECARBOXALDEHYD E	31906-04-4	0
80	ANISE ALCOHOL	105-13-5	0
81	BENZYL CINNAMATE	103-41-3	0
82	FARNESOL	4602-84-0	0
83	BUTYLPHENYL METHYLPROPIONAL	80-54-6	0
84	LINALOOL	78-70-6	0
85	BENZYL BENZOATE	120-51-4	0
86	CITRONELLOL	106-22-9	0
87	HEXYL CINNAM-ALDEHYDE	101-86-0	0
88	LIMONENE	5989-27-5	18.0 - 30.0
89	METHYL HEPTIN CARBONATE	111-12-6	0
90	ALPHA-ISOMETHYL IONONE	127-51-5	0
91	EVERNIA PRUNASTRI EXTRACT	90028-68-5	0
92	EVERNIA FURFURACEA EXTRACT	90028-67-4	0



IFRA Conformity Certificate

Product Name	Spruce Hemlock Essential Oil	
INCI	Tsuga Canadensis Leaf Oil	
CAS Number	Not Applicable	
EINECS Number	Not applicable	

Product Statement

We certify that the above named material contains the following restricted components listed in the 48th Amendment of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA) Code of practice.

Restricted Component	CAS No.	% Level in Produc	t
Limonene	5989-27-5	18.0 - 30.0	Specification Stds

It is the ultimate responsibility of the customer to ensure the safety of the intended final product containing this material, by carrying out additional tests if necessary.

DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



Material Safety Data Sheet Spruce Hemlock Essential Oil

SECTION 1: Identification of the substance/mixture and of the company/undertaking					
1.1 Product Identifier	1.1 Product Identifier				
Product Name	Spruce Hemlock Essential Oil				
Biological Definition	Tsuga Canadensis Leaf Oil is the volatile oil obtained from the leaves of Tsuga canadensis, Pinaceae				
INCI Name	Tsuga Canadensis Leaf Oil				
Synonyms & Trade Names	Spruce Hemlock Oil				
Internal Product Code	R01142				
CAS-No	N/A EC No. N/A EINECS No. N/A			N/A	

1.2 Details o	f the supplie	r of the safe	ty data sheet

Company Identification Madar Corporation

19-20 Sandleheath Industrial Estate,

Fordingbridge, Hampshire, SP6 1PA, UK

Tel: 01425 655555

Email: technical@madarcorporation.co.uk



SECTION 2: Hazards identification 2.1 Classification of the substance or mixture		
Classification (67/548/EEC)	The Full Text for all Hazard Statements are Displayed in Section 16.	
Classification (EU 1272/2008)	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:	GHS08 GHS09 GHS07 GHS02
Signal word:	Danger
Contains	Delta-3-Carene, alpha-Pinene, beta-Pinene, Limonene, Camphene.
Hazard Statements:	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. P305+P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P280 Wear protective gloves/protective clothing and eye/face protection. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P310 Immediately call a POISON CENTER or doctor/physician. P273 Avoid release to the environment. P501 Dispose of contents/container to regional, national regulation.
Supplementary Precautionary Statements:	None

2.3 Other hazards Adverse physio-chemical No additional data available

properties

Adverse effects on human health

No additional data available

SECTION 3: Composition/information on ingredients

3.1 Substances

%	INCI	CAS	EINECS	Classification (EC 1272/2008)
18-30	Limonene	5989-27-5	227-813-5	Flam. Liq. 3 – H226, Skin Irrit 2 – H315 Asp Tox. 1 – H304, Skin Sens. 1 – H317 Aquatic Acute 1 – H400, Aquatic Chronic 1 – H410
18-25	Camphene	79-92-5	201-234-8	Flam. Sol. 1 – H228, Eye Irrit 2 – H319, Aquatic Acute 1 – H400
10-20	alpha-Pinene	80-56-8	201-291-9	Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Asp. Tox. 1 - H304
3-5	beta-Pinene	127-91-3	204-872-5	Flam. Liq. 3 – H226, Skin Sens. 1 – H317 , Asp Tox. 1 – H304, Aquatic Chronic 1 – H410
1-5	delta-3-Carene	13466-78-9	236-719-3	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Sens. 1, H317

3.2 Mixtures	
EU INCI	US INCI
N/A	N/A



SECTION 4: First aid measures 4.1 Description of first aid measures		
General Information	See below for details	
Inhalation	Do not leave affected person unattended. Remove victim out of the danger area. Provide fresh air.	
Ingestion	If swallowed rinse mouth. Do NOT induce vomiting.	
Skin Contact	After contact with skin, wash immediately with plenty of water and soap. Remove contaminated clothing immediately	
Eye Contact	In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.	

4.2 Most important symptoms and effects, both acute and delayed

Observe risk of aspiration if vomiting Occurs.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Fire fighting measures

5.1 Extinguishing Media

Foam, Extinguishing powder, Carbon Dioxide. Avoid full water jet.

5.2 Special hazards arising from the substance or mixture.

B (fires of liquids or liquid turning substances). In case of fire toxic fumes like carbon monoxide and carbon dioxide may be liberated. Burning produces heavy smoke.

5.3 Advice for fire-fighters

Move undamaged containers from immediate hazard area if it can be done safely. Use suitable breathing apparatus. Regard to self protection.

SECTION 6: Accidental release measures

6.1 Personal precautions

Wear personal protection equipment. Avoid contact with skin, eye and clothing. Remove all sources of ignition. Provide adequate ventilation.

Give a warning to persons in the hazard area.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

6.4 References to other sections.

Please refer to Section 8 - Exposure controls/personal protection for further information on personal precautions Please refer to Section 13 - Disposal Considerations for further information on waste treatment.



SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Provide earthing of containers, equipment, pumps and ventilation facilities.

Take precautionary measures against static discharges.

Wear personal protective clothing (see chapter 8).

Do not breathe gas/fume/vapour/spray

Use only in well-ventilated areas.

When using do not eat, drink, smoke, sniff.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

7.3 Specific end use(s)

No additional data available.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

No additional data available.

8.2 Exposure Controls

Eye protection Use protection goggles according to EN166. Hand protection Use solvent and acid resistant protection gloves according to EN374.	0.2 Exposure controls			
	Eye protection	Use protection goggles according to EN166.		
If technical experies as ventilation measures are not possible as insufficient, requiretery protection must be	Hand protection		Use solvent and acid resistant protection gloves according to EN374.	
Respiratory Equipment In technical exhaust of ventilation measures are not possible of insufficient, respiratory protection must be worn.	Respiratory Equipment	If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.		
Hygiene Measures Good personal hygiene practices are always advisable, especially when working with chemicals / oils.	Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.		
Engineering Measures No additional data available.	Engineering Measures	No additional data available.		



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Mobile liquid
Colour	Colourless to slightly yellow
Odour	Characteristic
Relative Density	0.875- 0.898 @ 20°C
Flash Point (°C)	N/A
Refractive Index	1.460 - 1.480 @ 20°C
Melting Point (°C)	N/A
Boiling Point (°C)	N/A
Vapour Pressure	N/A
Solubility in Water @20°C	N/A
Auto-ignition temperature (°C)	N/A

9.2 Other information

No additional data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known.

10.2 Chemical stability

Product is stable at room temperature.

10.3 Possibility of hazardous reactions

No dangerous reactions expected if used according to specifications.

10.4 Conditions to avoid

More than room temperature will benefit the transfer from liquid to vapour phase and formation of explosive atmospheres. Storing the product in open containers will benefit the formation of peroxides and derogate the quality.

10.5 Incompatible materials

No additional data available.

10.6 Hazardous decomposition products

No dangerous decomposition products known.



SECTION 11: Toxicological information		
11.1 Information on toxicological effects.		
Acute toxicity:	Acute toxicity LD50 (oral) in mg/kg: > 5000 LD50 (dermal) in mg/kg: > 5000	
Skin corrosion / irritation:	No additional data available	
Serious eye damage/irritation:	No additional data available	
Respiratory or skin sensitisation:	No additional data available.	
Germ cell mutagenicity:	No additional data available	
Carcinogenicity:	No additional data available	
Reproductive toxicity:	No additional data available	
STOT-single exposure:	No additional data available	
STOT-repeated exposure:	No additional data available	
Aspiration hazard:	No additional data available	
Other information:	No additional data available	



SECTION 12: Ecological information

12.1 Toxicity

No additional data available

12.2 Persistence and degradability

No additional data available

12.3 Bio-accumulative potential

No additional data available

12.4 Mobility in soil

No additional data available

12.5 Results of PBT and VPVB assessment

No additional data available

12.6 Other adverse effects

No additional data available

SECTION 13: Disposal considerations

13.1 Waste Treatment Methods

Hazardous waste according to waste regulation Dispose according to legislation. Delivery to an approved waste disposal company. Non-contaminated packages may be recycled.

SECTION 14: Transport information

Warning Icon	FLAMMABLE 3
Proper Shipping Name	PINE OIL
UN No. Road	UN 1272
ADR Class	Class 3
Hazard No (ADR)	30
Hazchem Code	•3Y
UN No. SEA	UN 1272
IMDG Class	Class 3
IMDG Pack Gr.	Pk Gp III
EMS	N/A
UN No. AIR	UN 1272
Air Class	Class 3
Air Pack Gr.	Pk Gp III



15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Directives	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18th Dec 2006 Concerning the			
	Registration, Évaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European			
	Chemicals Agency, amending Directive 199/45/EC and repealing Council Regulation Council Regulation (EEC)			
	No793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and			
	Commission Directives 91/155/EEC, 93/67/EEC, and 93/105/EEC and 2000/21/EC including amendments.			
Statutory Instruments	The Chemicals (Hazard Information and Packaging for Supply Regulations 2009 (S.I. 2009 No 716).			
Approved Code of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for			
	Substances and Preparations			
Guidance Notes	Workplace Exposure Limits EH40. CHIP for everyone HSG 108.			

15.2 Chemical safety assessment

An assessment has not been executed as this is not a hazardous material according to article 31 of REACH 1907/2006.

SECTION 16: Other information

Training instructions: Refer to possible hazard before use of this product.

Abbreviations and acronyms:

MODO	Material Safety Data Sheet	
MSDS		
INCI	International Nomenclature of Cosmetic Ingredients	
CAS	Chemical Abstract Service	
IMDG	International Maritime Code for Dangerous Goods	
ADR	Accord européen sur le transport des marchandises 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 and Labelling of Chemicals	
Trem Card	Transport Emergency Card	
STOT	Specific Target Organ Toxicity	
Hazard and/or Precautionary	H226 Flammable liquid and vapour.	
Statements in Full	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.	
N/A	Not Available	

Complies with REACH guidance for SDS as circulated by ECHA 2011.

Disclaimer

This information contained herein is believed to be true and correct at the time of our response. Any views or opinions presented in this document are solely those of the author and do not necessarily represent those of Madar Corporation. Neither can we guarantee the accuracy of any of the information or data contained within. It is not, and should not be construed as, a guarantee or warranty, or a part of our contractual or other legal obligations. Disclosure, reproduction or transmission, in whole or in part, without prior written consent of Madar Corporation is not permitted.



SPECIFICATION SHEET

Spruce Hemlock Essential Oil

Internal Code	R01142	
Product Name	Spruce Hemlock Essential Oil	
INCI	Tsuga Canadensis Leaf Oil	
CAS Number	Not Applicable	
EINECS Number	Not Applicable	

Product Description

Tsuga Canadensis Leaf Oil is the volatile oil obtained from the leaves of Tsuga Canadensis, Pinaceae.

Analytical Details	Range
Appearance	Mobile liquid
Colour	Colourless to slightly yellow
Odour	Characteristic
Relative Density @ 20	0.875 – 0.898
Optical Rotation @ 20	-38 to -60
Refractive Index @ 20	1.460 – 1.480
Shelf Life / Best Before	24 Months