



Safety Data Sheet

01. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

1.1 Product Identifier					
Product Name		Spruce Oil			
Biological Definition		Picea Abies Leaf Oil is the volatile oil expressed from the needles of the Norway Spruce, <i>Picea abies</i> (L.), <i>Pinaceae</i>			
INCI Name		Picea Abies Leaf Oil			
Synonyms & Trade Names		Abies Oil			
CAS-No	91770-69-3	EC No.	294-855-9	EINECS No.	294-855-9
1.2 Relative identified uses of the substance or mixture and uses advised against					
No additional data available.					
1.3 Details of the supplier of the safety data sheet					
Golden Bough Botanicals Inc 12-1585 Cliveden Ave Delta BC V3M 6M1					
1.4 Emergency Tel. No.		604-540-8700 (Monday-Friday 8:30 am-4:30 pm)			

02. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
The Full Text for all Hazard Statements are Displayed in Section 16.	
Classification (EC 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 (EC) No 1272/2008	
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">GHS08 </div> <div style="text-align: center;">GHS09 </div> <div style="text-align: center;">GHS07 </div> <div style="text-align: center;">GHS02 </div> </div>	
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

PBT or vPvB according to Annex XIII	No additional data available
Adverse physio-chemical properties	No additional data available
Adverse effects on human health	No additional data available

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

15-30% 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

15-25% 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

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

2-5% 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

1-5% 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

04. FIRST AID MEASURES

4.1 Description of first aid measures

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

05. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Foam Extinguishing powder Carbon dioxide (CO ₂) Avoid full water jet
5.2 Special hazards arising from the product
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 firefighters
Move undamaged containers from immediate hazard area if it can be done safely. Use suitable breathing apparatus. Regard to self protection

06. ACCIDENTAL RELEASE MEASURES

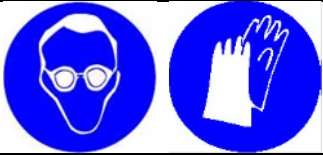
6.1 Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment. Avoid contact with skin, eye and clothing. Remove all sources of ignition. Provide adequate ventilation. Give a warning to persons in the hazard area
6.2 Environmental Precautions
Do not allow 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 Reference to other sections
See protective measures under point 7 and 8.

07. 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.

08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters	
No additional data available.	
8.2 Exposure controls	
Protective Equipment	
	
Process Conditions	Technical measures and the application of suitable work processes have priority over personal protection equipment.
Engineering Measures	No additional data available.
Respiratory Equipment	If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
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.
Eye Protection	Use protection goggles according to EN166.
Other Protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.
Personal Protection	Use personal protection according to Directive 89/686/EEC.
Skin Protection	Protective work clothing solvent resistant (should be checked regularly).
Environmental Exposure Controls	Avoid discharging into drainage water. Only remove via authorised companies.

09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	liquid
Colour	Colourless to slightly yellow
Odour	Characteristic
Relative Density	0.875- 0.898 @ 20°C
Flash Point (°C)	42°C
Refractive Index	1.460 - 1.480 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	No additional data available.
Vapour Pressure	No additional data available.
Solubility in Water @20°C	Insoluble in water.
Auto-ignition temperature (°C)	No additional data available.
9.2 Other information	
No additional data available.	

10. STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reactions known
10.2 Chemical stability
Product is stable at room temperature.
10.3 Possible hazardous reactions
No dangerous reactions expected if used according to specifications.
10.4 Conditions to Avoid
Temperatures 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.

11. TOXOLOGICAL 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
Photo-toxicity	No additional data available
Other Information	No additional data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No additional data available
12.2 Persistence & degradability
No additional data available
12.3 Bioaccumulation 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.

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.

14. TRANSPORT INFORMATION**14.1 UN number**

UN No. Road	1272
UN No. SEA	1272
UN No. AIR	1272

14.2 UN proper shipping name

PINE OIL

14.3 Transport hazard class(es)

ADR/RID/ADN Class: 3
 ADR/RID/ADN Class: 3
 IMDG Class 3
 ICAO Class/Division

Transport Labels



EAC – 3Y
 HIN – 30

14.4 Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

14.5 Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

**14.6 Special precautions for user**

See section 6 to 8.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code
Packed and transferred according to transport regulations.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
<p>Statutory Instruments The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).</p> <p>Guidance Notes Workplace Exposure Limits EH40. CHIP for everyone HSG(108).</p> <p>EU Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.</p>
15.2 Chemical safety assessment
No additional information available.

16. OTHER INFORMATION

Hazard and/or Precautionary Statements in Full	H226 H228 H304 H315 H317 H319 H410 H411	Flammable liquid and vapour. Flammable Solid May be fatal if swallowed and enters airways. Causes skin irritation May cause an allergic skin reaction Causes serious eye irritation. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.
Other Information	None	
Revision Date	July 8, 2015	
Reason for revision	New SDS	
Rev No/Repl, SDS Generated	01	

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.