

Safety Data Sheet

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

1.1 Product Identifer

Product Name: Amyris Oil								
Biolo Ruta		efinition: Amyris Balsamifera E	Bark Oil is the volati	e oil distilled from the barl	k of the tree, Amyr	is balsamifera,		
INCI Name: Amyris Balsamifera Bark Oil								
Synonyms & Trade Name:								
CAS-	No	8015-65-4 / 90320-49-3	EC No.	- / 291-076-6	EINECS No.	- / 291-076-6		
1.2	Relativ	e identified uses of the substa	ance or mixture an	d uses advised against				
	Flavou	rs. Fragances.						
1.3	Details	of the supplier of the safety of	lata sheet					
	Golder	n Bough Botanicals Inc 12-1585	Cliveden Ave Delta	a BC V3M 6M1				
1.4	Emerg	ency Tel. No.	604-540-8700 (Mo	nday-Friday 8:30 am-4:30	pm)			
2.	HAZA	RDS IDENTIFICATION						
2.1	Classif	ication of the substance or m	ixture					
	No ad	ditional data available.						
	Hazard	fication (EC 1272/2008) dous to the Aquatic Environmen Harmful to aquatic life with long		d Category 3				
2.2	Label B	Elements						
	Label	in accordance with (EC) No 12	272/2008					
	No	ne						
	-	Word:						
	None							
	Conta No ade	i ns: ditional data available.						
	Hazar	d Statements						
	H412	Harmful to aquatic life with long	asting effects					
	Preca	utionary Statements						
	P273 /	Avoid release to the environmen	t					
	P501	Dispose of contents/container in	accordance with lo	cal/regional/national/interr	national regulations	5		

Supplementary Precautionary Statements

None

2.3 Other Hazards

PBT or vPvB according to Annex XIII None. Adverse physio-chemical properties None. Adverse effects on human health None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

1.5% trans-Nerolidol Cas. No: 40716-66-3 Classification (EC 1272/2008): EDI 2-EH A1-EH C1;H319- H410

4. FIRST AID MEASURES

Description of first aid measures 4.1 Inhalation Remove from exposure site to fresh air, keep at rest, and obtain medical attention. Ingestion Rinse mouth with water and obtain medical attention. Skin Contact Remove contaminated clothes. Wash thoroughly with soap and water. Contact physician if irritation persists. **Eve Contact** Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist. 4.2 Most important symptoms and effects, both acute and delayed None expected, see Section 4.1 for further information. 4.3 Indication of any immediate medical attention and special treatment needed None expected, see Section 4.1 for further information.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Extinguishing media: Carbon dioxide (CO2). Dry Chemical Powder. Foam.

5.2 Special hazards arising from the product

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

5.3 Advice for firefighters

In case of insufficient ventilation, wear suitable respiratory equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

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 and 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 Reference to other sections

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

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

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

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only nonsparking tools. Take precautionary measures against static discharge.

7.3 Specific end use(s)

Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

None.
Exposure controls
Protective Equipment
Process Conditions Ensure area is well ventilated. Avoid vapour inhalation.
Engineering Measures No additional data available.
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 approve 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 Wear protective gloves/eye protection/face protection
Eye Protection Wear protective gloves/eye protection/face protection
Other Protection Wear suitable protection to avoid contact with skin and eyes. Do not inhale vapours.
Hygiene Measures Good personal hygiene practices are always advisable, especially when working with chemicals / oils.
Personal Protection Avoid inhalation of the product. Avoid contact with skin and eyes.
Skin Protection Wear protective clothing to reduce the risk of skin and eye contact.
Environmental Exposure Avoid discharging into drainage water.

9.1 Information on basic physical and chemical properties

Appearance Viscous liquid, pale yellow to yellow gold.

Colour Pale yellow to yellow gold.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties
	Odour Characteristic – sweet, woody.
	Relative Density 0.946 – 0.978 @20°C
	Flash Point (°C) >100
	Refractive Index 1.500 – 1.512 @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.
9.2	Other information
	No additional data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Presents no significant reactivity hazard, by itself or in contact with water.

10.2 Chemical stability

Good stability under normal storage conditions.

10.3 Possible hazardous reactions

Not expected under normal conditions of use.

10.4 Conditions to Avoid

Avoid extreme heat.

10.5 Incompatible materials

Avoid strong acids, alkalis and oxidising agents.

10.6 Hazardous Decomposition Products

Not expected.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity This material does not meet the criteria for classification for health hazards under Regulation (EC) No 1272/2008. Assumed Toxicity Value (LD50 or ATE) for Acute Oral Toxicity: N/A Assumed Toxicity Value (LD50 or ATE) for Acute Dermal Toxicity: N/A Assumed Toxicity Value (LC50 or ATE) for Acute Inhalation Toxicity: N/A Inhalation Route: N/A Refer to Section 2 for additional information.
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.

11. TOXICOLOGICAL INFORMATION

1.1	Information on toxicological effects
	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

Harmful to aquatic life with long lasting effects.

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

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.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

14.1 UN number

	UN No. Road Not classified. UN No. Sea Not classified. UN No. Air Not classified.
14.2	UN proper shipping name
	None.
14.3	Transport hazard class(es)
	None.
14.4	Packing group
	None.
14.5	Environmental hazards
	Not environmentally hazardous for transport.
14.6	Special precautions for user
	See sections 6 – 8.

14. TRANSPORT INFORMATION

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

Not classified.

15. REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code of Practise

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

CHIP for everyone HSG(108). Workplace Exposure Limits EH40

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.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out for this product.

16. OTHER INFORMATION

16.1 Hazard and/or Precautionary Statements

H412 harmful to aquatic life with long lasting effects.

16.2 Other Information

None.

16.3 Revision

Revision Date: August 17, 2016 Reson 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.