



SAFFIRE BLUE INC.

MATERIAL SAFETY DATA SHEET

Mandarin Red Essential Oil – Certified Organic

Revision Date:

4th June 2013



SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product Name:	Mandarin Red Essential Oil – Certified Organic
1.2 Botanical Name:	<i>Citrus reticulata</i> var. 'mandarin'
1.3 Product Code:	OCMANDRED
1.4 Synonyms:	Citrus nobilis var. deliciosa
1.5 AUSTRALIAN AICS Name:	Mandarin Oil
1.6 USA INCI Name:	Citrus Nobilis [Mandarin Orange] Peel Oil
1.7 EU [CosIng] INCI Name:	Citrus Reticulata Peel Oil
1.8 UN Proper Shipping Name:	Terpene hydrocarbons, n.o.s.
1.9 UN Technical Shipping Name:	Not applicable
1.10 UN Number:	2319
1.11 AUSTRALIAN Schedule Name:	Not Scheduled
1.12 Recommended Product Use:	Cosmetic and aromatherapy ingredient.

Function: Fragrance Ingredient; Skin Conditioning Agent - Miscellaneous.

Categories: Moisturising preparations; Cleansing products [Cold creams, cleansing lotions, liquids and pads]; Bath soaps and detergents; Shampoos [Non-colouring]; Tonics, dressings, and other Hair grooming aids; Bath oils, tablets, and salts; Skin care preparations, miscellaneous; Bath preparations, miscellaneous; Face and Neck preparations [Excluding shaving preparations]; Fragrance preparations, miscellaneous; Personal cleanliness products, miscellaneous; Night skin care preparations; Powders [Dusting and Talcum, excluding aftershave talcs].

1.13 Company:	Saffire Blue Inc.
1.14 Address:	1444 Bell Mill Road, Tillsonburg, ON N4G4G9 Canada
1.15 Telephone Number:	Tel: 519-286-0295
1.16 Fax Number:	
1.17 Email:	info@saffireblue.ca
1.18 Web Site:	www.saffireblue.ca



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SECTION 2 – HAZARDS IDENTIFICATION

Hazardous according to criteria of NOHSC

Dangerous [Flammable] Good according to the Australian Dangerous Goods (ADG) Code

Class: 3; Subsidiary Risk: None; Packaging Group: III

NOT A SUSMP Scheduled Poison

2.1 Risk Symbols:	Xn	Harmful.
	Xi	Irritant.
	F	Flammable.
	N	Dangerous for the Environment.
2.2 Risk Phrases:	R10	Flammable.
	R22	Harmful if swallowed.
	R36	Irritating to eyes.
	R37	Irritating to respiratory system
	R38	Irritating to skin.
	R43	May cause sensitisation by skin contact.
	R44	Risk of explosion if heated under confinement.
	R51	Toxic to aquatic organisms.
	R53	May cause long-term adverse effects in the aquatic environment.
	R65	Harmful: may cause lung damage if swallowed.
	2.3 Safety Phrases:	[S2]
S3		Keep in a cool place.
S7		Keep container tightly closed.
S13		Keep away from food, drink and animal feeding stuffs.
S15		Keep away from heat.
S16		Keep away from sources of ignition – No smoking.
S23		Do not breathe fumes / vapours.
S24		Avoid contact with skin.
S25		Avoid contact with eyes.
S26		In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28		After contact with skin, wash immediately with plenty of soap and water.
S29		Do not empty into drains.
S33		Take precautionary measures against static discharges.
S36		Wear suitable protective clothing.
S37		Wear suitable gloves.
S39		Wear eye / face protection.
S41		In case of fire and / or explosion do not breathe fumes.
S43	In case of fire use Carbon Dioxide; Dry Chemical; Universal-Type Foam. Never use water jets.	
S45	In case of accident or if you feel unwell, seek medical advice immediately [show the label where possible].	
S51	Use only in well-ventilated areas.	
S60	This material and its container must be disposed of as hazardous waste.	
S62	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.	
S63	In case of accident by inhalation: remove casualty to fresh air and keep at rest.	
S64	If swallowed, rinse mouth with water, [only if the person is conscious].	
2.4 Other:		None identified.



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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Ingredients:

Component Entity	CAS Number	EINECS Number	Proportions [%w/w]
Certified Organic Citrus Reticulata Peel Oil	8008-31-9	Not allocated	100% pure

SECTION 4 - FIRST AID MEASURES

- 4.1 Eye Contact:** Flush immediately with clean water for at least 15 minutes. Ensure irrigation under eyelids. Do not try to remove contact lenses unless trained.
Contact a physician immediately.
- 4.2 Skin Contact:** Remove any contaminated clothing and footwear. Clean before re-use.
Wash affected areas thoroughly with soap and water for at least 15 minutes.
Contact a physician as necessary.
- 4.3 Inhalation:** Remove from the exposure to fresh air. If breathing has stopped, administer artificial respiration and oxygen if available.
Contact a physician as necessary.
- 4.4 Ingestion:** Do Not induce vomiting.
Wash out mouth with water and give water slowly to dilute [as much as casualty can comfortably drink] provided person is conscious.
Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
Contact a physician or local poison control centre immediately.
If vomiting occurs, lean patient forward or place on left side [head-down position, if possible] to maintain open airway and prevent aspiration.
- 4.5 For Advice:** Contact a Poisons Information Centre [Phone eg Australia 131126; New Zealand 0800 764 766] or a doctor at once.
- 4.6 Advice to Doctor:** Treat symptomatically. Note the nature of this product.

SECTION 5 – FIRE FIGHTING MEASURES

- 5.1 Extinguishing Media:** Carbon Dioxide; Dry Chemical; Universal-Type Foam.
- 5.2 Unsuitable Extinguishing Media:** Water Spray; Others not established.
- 5.3 Unusual Firefighting Hazards:** None identified.
- 5.4 Special Procedures:** Determine the need to evacuate or isolate the area according to your local emergency plan.
- 5.5 Protective Equipment:** Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving essential oils or chemicals.
- 5.6 Combustion Products:** Oxides of carbon.
- 5.7 Contact Point:** Dial 000 Emergency in case of fire [In Australia]
or Local Emergency Authority [Out of Australia].

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions:** Use of self-contained breathing apparatus is recommended for any major chemical spill. Refer also to section 8.
- 6.2 Safety Precautions:** Eliminate ALL ignition sources. Ventilate area. Determine the need to evacuate or isolate the area according to your local emergency plan;
- 6.3 Environmental Precautions:** Keep away from drains, surface and ground water.
Report spills to appropriate Authorities if required.
- 6.4 Methods For Cleaning Up:** Contain spill and recover free product. Absorb remainder on vermiculite or other suitable absorbent material. Wipe small spills with cloth. Clean with hot water and detergent. Refer also to Section 13. for disposal procedures.



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SECTION 7 – HANDLING AND STORAGE

7.1 Handling: Avoid inhalation and contact with skin and eyes. Good personal hygiene practices should be used. Wash after any contact, before breaks and meals, and at the end of the work period. Contaminated clothing and shoes should be cleaned before re-use. No smoking.

7.2 Storage: Containers should be kept closed in order to minimise contamination. Store in a cool, dry, well ventilated place protected from light. Keep from extreme heat and away from ALL sources of ignition. Make sure the material does not come into contact with substances listed as: "Materials to Avoid", Refer to Section 10. Store in stainless steel drums or amber glass containers. For short term storage only: epoxy phenolic lined steel drums.

7.3 Unsuitable Packaging Materials: None established.

7.4 Special Procedures: Protect against electrostatic charges, Others not established.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure Limits There is a blanket recommendation of 10 mg/m³ for inspirable dusts or mists when limits have not otherwise been established.

OSHA TWA: None established.
OSHA STEL: None established.
ACGIH TWA: None established.
ACGIH STEL: None established.
NOHSC TWA: None established.
NOHSC STEL: None established.

8.2 Respiratory Protection: None generally required. Use NIOSH approved respirator in confined areas or if ventilation is inadequate.

8.3 Ventilation Protection: Ensure adequate ventilation to keep exposure levels to a minimum. Local exhaust meeting ACGIH criteria is required. General exhaust is recommended.

8.4 Eye Protection: Using goggles or face shield is recommended.

8.5 Protective Gloves: Using chemical resistant gloves is recommended.

8.6 Protective Clothing: Using chemical resistant clothing is recommended.

8.7 Protective Equipment: An eyewash fountain and / or safety shower should be available in the work area.

8.8 Special Engineering Controls: None established.

8.9 Other Personal Protection: Consult the following Australian Standards for general advice regarding safety clothing and equipment: Respiratory Equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS 2919**, Industrial Eye Protection: **AS 1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS 2210**.

8.10 Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol / spray applications may require additional precautions.



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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance:	Liquid
9.2 Odour:	Characteristic
9.3 Specific Gravity:	0.840 to 0.880 @ 20°C
9.4 Refractive Index:	1.4650 to 1.4820 @ 20°C
9.5 Optical Rotation:	Not available.
9.6 pH:	Not available.
9.7 Solubility:	Soluble in ethyl alcohol
9.8 Solubility in Water:	Insoluble
9.9 Flash Point:	48°C [Closed Cup]
9.10 Flammability Limits [as % v/v in Air]	
Lower Explosion Limit:	Not available.
Upper Explosion Limit:	Not available.
9.11 Autoignition Temperature:	Not available.
9.12 Melting Point:	Not available.
9.13 Boiling Range:	Not available.
9.14 Vapour Pressure:	Not available.
9.15 Vapour Density:	Not available.
9.16 Viscosity:	Not available.

SECTION 10 – STABILITY AND REACTIVITY

10.1 Stability:	Chemically stable, hazardous material. This material presents no significant reactivity hazard.
10.2 Conditions to Avoid:	None established.
10.3 Materials to Avoid:	Strong acids, strong alkalis and oxidizing agents.
10.4 Flammability:	Flammable liquid.
10.5 Hazardous Polymerization:	Will not occur.
10.6 Hazardous Combustion or Decomposition Products:	Carbon monoxide and unidentified organic compounds may be formed during combustion.

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Health Hazards	
Acute Effects:	
Swallowed:	Harmful, May cause lung damage if swallowed.
Eye:	May be irritating.
Skin:	May be irritating.
Inhalation:	May be harmful.
Chronic Effects:	None identified.
Mutagenic Effects:	None identified.
Reproductive Effects:	None identified.
Carcinogenic Effects:	None identified.
Sensitisation:	None identified.
Infectious:	Not applicable.
11.2 Acute Toxicity	
LD50 [Oral]:	> 5,000 mg/Kg [Rat].
LD50 [Dermal]:	> 5,000 mg/Kg [Rabbit].
LC50 [Inhalation]:	Not available.
11.3 Short Term Toxicity:	Not available.
11.4 Long Term Toxicity:	Not available.
11.5 Human Exposure Tests:	Not available.



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11.6 SCCNFP Allergens Annex III – Cosmetic Directive 2003/15/EC [7 th amendment]. Detection Limit 0.001%.					
CONSTITUENT	IFRA	EFFA	CAS Number	EINECS Number	RANGE
Amyl Cinnamal:	YES	NO	122-40-7	204-541-5	Not Detected
Amyl Cinnamyl Alcohol:	YES	NO	101-85-9	202-982-8	Not Detected
Anisyl Alcohol:	NO	YES	105-13-5 1331-81-3	203-273-6	Not Detected
Benzyl Alcohol:	NO	YES	100-51-6	202-859-9	Not Detected
Benzyl Benzoate:	NO	YES	120-51-4	204-402-9	Not Detected
Benzyl Cinnamate:	NO	YES	103-41-3	203-109-3	Not Detected
Benzyl Salicylate:	NO	YES	118-58-1	204-262-9	Not Detected
Cinnamal:	YES	YES	104-55-2	203-213-9	Not Detected
Cinnamyl Alcohol:	YES	YES	104-54-1	203-212-3	Not Detected
Citral:	YES	YES	5392-40-5	226-394-6	Not Detected
Citronellol:	NO	YES	106-22-9	203-375-0	< 0.5%
Coumarin:	NO	YES	91-64-5	Not allocated	Not Detected
Eugenol:	YES	YES	97-53-0	202-589-1	Not Detected
Farnesol:	YES	YES	4602-84-0	225-004-1	Not Detected
Geraniol:	NO	YES	106-24-1	203-377-1	Not Detected
Hexyl Cinnamal:	YES	NO	101-86-0	202-983-3	Not Detected
Citronellal Hydrate:	YES	NO	107-75-5	203-518-7	Not Detected
iso-Eugenol:	YES	YES	97-54-1	202-590-7	Not Detected
Butyl Phenyl Methyl Propional:	YES	NO	80-54-6	201-289-8	Not Detected
d-Limonene:	YES	YES	5989-27-5	227-813-5	< 95.0%
Linalool:	YES	YES	78-70-6	201-134-4	< 0.5%
Hydroxyisohexyl-3-Cyclohexene Carboxaldehyde:	NO	NO	31906-04-4	250-863-4	Not Detected
Methyl Heptin Carbonate:	YES	NO	111-12-6	203-836-6	Not Detected
Methyl Ionone:	YES	NO	127-51-5 90028-68-5	204-846-3 289-861-3	Not Detected
Evernia Prunastri Extract [Oakmoss]:	YES	NO	9000-50-4 68917-10-2	289-860-8	Not Detected
Evernia Furfuracea Extract [Treemoss]:	YES	NO	68648-41-9 68917-40-8		Not Detected

11.7 Additional EFFA Listed Sensitisers & IFRA Notifiable Substances. Detection Limit 0.001%.					
CONSTITUENT	IFRA	EFFA	CAS Number	EINECS Number	RANGE
No Additional Sensitisers	NO	NO	Not allocated	Not allocated	Not Detected
No Additional Notifiable Substances	NO	NO	Not allocated	Not allocated	Not Detected

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SECTION 12 – ECOLOGICAL INFORMATION

12.1 Eco-toxicity:	None established. Avoid pollution to soil, rivers and the ocean.
12.2 Persistence & Degradability:	Low persistence level and readily biodegradable.
12.3 Mobility:	Low mobility in the soil.
12.4 Bio-accumulative Potential:	None established.
12.5 Other Adverse Effects:	None established.

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste Material:	Place material and / or absorbent into sealed containers and dispose of in accordance with current applicable laws and regulations. Refer to local Authority advice.
13.2 Contaminated Packaging:	Dispose of in accordance with current applicable laws and regulations. Refer to local Authority advice.
13.3 Note:	Empty containers can have residues, gases and mists. Use the proper Waste Disposal Methods & Procedures for Empties as well.

SECTION 14 – TRANSPORT INFORMATION

14.1 Transportation:	Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods [ADG] Code for Transport by Road and Rail. Transport as per the "Australian Dangerous Goods [ADG] Code" for Class 3 [Flammable Liquids], Packaging Group III Substances. Not to be transported with Classes 1 [Explosives], 2.1 [Flammable Gases] [nb this applies only when the capacity of individual container exceeds 500 Lt], 2.3 [Toxic Gases], 4.2 [Spontaneously Combustible Substances], 5.1 [Oxidising Agents], 5.2 [Organic Peroxides], 7 [Radioactive Substances], and Foodstuffs or Foodstuff empties.
14.2 UN Number:	2319
14.3 Proper Shipping Name:	Terpene hydrocarbons, n.o.s.
14.4 Technical Shipping Name:	Not applicable
14.5 DG Class / Subsidiary Risk:	Class 3 ; no subsidiary risk.
14.6 Packaging Group:	III
14.7 Special Precautions:	None established.
14.8 Hazchem Code:	3[Y]



14.9 Maritime Transportation IMDG	14.10 Air Transportation ICAO-TI and IATA-DGR
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<table style="width: 100%; border-collapse: collapse;"> <tr><td>IMDG Class:</td><td>3</td></tr> <tr><td>Label:</td><td>3</td></tr> <tr><td>UN Number:</td><td>2319</td></tr> <tr><td>Packaging Group:</td><td>III</td></tr> <tr><td>EMS Number:</td><td>F-E, S-D</td></tr> <tr><td>Marine Pollutant:</td><td>YES</td></tr> <tr><td>Proper Shipping Name:</td><td>Terpene hydrocarbons, n.o.s.</td></tr> <tr><td>Technical Shipping Name:</td><td>Not applicable</td></tr> </table>	IMDG Class:	3	Label:	3	UN Number:	2319	Packaging Group:	III	EMS Number:	F-E, S-D	Marine Pollutant:	YES	Proper Shipping Name:	Terpene hydrocarbons, n.o.s.	Technical Shipping Name:	Not applicable	<table style="width: 100%; border-collapse: collapse;"> <tr><td>ICAO / IATA Class:</td><td>3</td></tr> <tr><td>Label:</td><td>3</td></tr> <tr><td>UN Number:</td><td>2319</td></tr> <tr><td>Packaging Group:</td><td>III</td></tr> <tr><td>Proper Shipping Name:</td><td>Terpene hydrocarbons, n.o.s.</td></tr> <tr><td>Technical Shipping Name:</td><td>Not applicable</td></tr> </table>	ICAO / IATA Class:	3	Label:	3	UN Number:	2319	Packaging Group:	III	Proper Shipping Name:	Terpene hydrocarbons, n.o.s.	Technical Shipping Name:	Not applicable
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SECTION 15 – REGULATORY INFORMATION

15.1 SUSMP Schedule:		Not Scheduled.
15.2 SUSMP Name:		Not allocated.
15.3 Warning Statements:	89	Application to skin may increase sensitivity to sunlight.
15.4 Safety Directions:	1	Avoid contact with eyes.
	3	Wear eye protection when mixing or using.
	4	Avoid contact with skin.
	5	Wear protective gloves when mixing or using.
	6	Wash hands after use.
	11	No smoking.
	15	Store under cover in a dry, clean, cool, well ventilated place away from sunlight.
	23	Keep away from heat, sparks and naked flames.
	25	Avoid contact with food.
15.5 Standard Statements:	A	For advice, contact a Poisons Information Centre [Phone eg Australia 131126; New Zealand 0800 764 766] or a doctor at once.
	G3	If swallowed, do NOT induce vomiting.
15.6 AICS:		This product is listed on the Public AICS Database.

16. ADDITIONAL INFORMATION

16.1 Revision Date: 4th June 2013**16.2 DISCLAIMER**

The information contained in this Material Safety Data Sheet is obtained from current and reliable sources. Saffire Blue Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This Material Safety Data Sheet summarises our best current knowledge of the health and safety hazard information of the product. This document is thus, intended only as a guide to the appropriate precautionary handling of the material by properly trained personnel using this product. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. As the ordinary or otherwise use(s) of this product is outside the control of Saffire Blue Inc., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. Saffire Blue Inc. expressly disclaims responsibility as to the ordinary or otherwise use(s). Furthermore, nothing contained herein should be considered as a recommendation by Saffire Blue Inc. as to the fitness for any use. The liability of Saffire Blue Inc. is limited to the value of the goods and does not include any consequential loss. Saffire Blue Inc. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. Saffire Blue Inc. shall not be responsible for any damages resulting from use of or reliance upon this information. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties.

16.3 MANUFACTURED PRODUCTS INGREDIENT DISCLAIMER

As the availability of ingredients and raw materials is not always certain whether due to changes in nature or otherwise, Saffire Blue Inc. reserves the right to substitute alternate ingredients/raw materials in the manufacture of its products and bases in order to maintain supply to its customers. Customers should always refer to the ingredients label as affixed to each product or to specification sheets which are current at the time of supply of the product.