

Certificate of Analysis

Product Name: Neroli Oil

Physical Data:

Parameter

Refractive Index @20°C: 1.4617

Relative Density @ 20°C: -1.58

Specific Gravity @ 20°:0.8832

Chromatographic Profile:

Compounds

Sample : *Citrus aurantium spp.amara*

Chromatographic Profile

Component	Percent Concentration
d-Limonene	2.92
linalool	25.62
a-terpineol	1.71
linalyl acetate	27.75
Geraniol	4.09

Shelf Life: 36 Months from Date Shipped.



MATERIAL SAFETY DATA SHEET (MSDS) –

*****FOR MANUFACTURING USE ONLY*****

Product Name: Neroli Oil

This revision issued: March, 2011

Substance type: Essential oils are usually mixtures of terpene compounds and their derivatives.

Trade Name: Neroli Oil

Botanic name: *Citrus aurantium spp amara*

Product Use: Aromatherapy fragrance and flavour product.

Creation Date: March, 2011

Revision Date: March, 2016

Composition/Information on Ingredients

Ingredients INCI Name CAS No Conc,% TWA (mg/m³) STEL (mg/m³)

Neroli Oil *Citrus aurantium spp amara* 8016-38-4 not set not set

This product is made from natural sources and may vary slightly from batch to batch.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Hazards Identification

Risk Phrases: Not Hazardous - No criteria found.R36. Irritating to eyes.

Safety Phrases: S39. Wear eye/face protection. S25. Avoid contact with eyes.

SUSDP Classification: None allocated.

ADG Classification: Class 3, Sub risk: None allocated

UN Number: 2319 Terpene Hydrocarbons N.O.S Class 3 PKG GRP III 3 (Y)

Emergency Overview

Physical Description & colour: Light yellow to orange liquid

Odour: Fresh floral aroma

Major Health Hazards: No major health hazards are known.

Potential Health Effects

Inhalation

Short term exposure: Available data indicates that this product is not harmful. In addition, product is unlikely to cause any discomfort or irritation.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However, product may be mildly irritating to skin in normal use, and may cause discomfort on extended exposure which should disappear once contact ceases.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact

Short term exposure: This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Available data shows that this product is not harmful. However, ingestion may result in gastric disturbances and nausea. Available data shows that this product is not harmful. However, ingestion may result in gastric disturbances and nausea.

Long Term exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

NOHSC: No significant ingredient is classified as carcinogenic by NOHSC.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

First Aid Measures**General Information:**

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia and is available at all times. Have this MSDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

Eye Contact: Flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes while holding the eyelid(s) open. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Quickly and gently blot or brush away product. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water until the product is removed or until a few minutes after irritation has ceased, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face.

Ingestion: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Fire Fighting Measures

Fire and Explosion Hazards: This product is classified as a C1 combustible product. There is a slight risk of an explosion from this product if commercial quantities are involved in a fire.

Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.

Fire Fighting: Immediately evacuate the area of unnecessary personnel. If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: 60°C

Upper Flammability Limit: No data.

Lower Flammability Limit: No data.

Autoignition temperature: No data.

Flammability Class: C1

Accidental Release Measures**Accidental release:**

In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include PVC, Viton. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle

containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry. Exothermic reactions leading to spontaneous combustion are possible when this product is absorbed onto porous materials such as zeolites, other mineral derived products, and even rags. Therefore, avoid the use of those materials and seek specialist advice in large scale cleanup processes.

Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Store in a cool, well ventilated area, and make sure that surrounding electrical devices and switches are suitable. Check containers periodically for leaks. Containers should be kept closed in order to minimise contamination and possible evaporation. Make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10. If you keep more than 100L of flammable liquids of Packaging Groups I and or II, you probably require a license to do so. If you have any doubts, we suggest you contact your licensing authority in order to clarify your obligations. Note that this product is combustible and therefore, for Storage, meets the definition of Dangerous Goods in some states. We suggest you consult your state's Dangerous Goods laws in order to clarify your obligations regarding the storage of this product. Make sure that containers of this product are kept tightly closed. Keep containers of this product in a well ventilated area. Keep away from combustible materials. Make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10. Check packaging - there may be further storage instructions on the label.

Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Exposure Limits TWA (mg/m³) STEL (mg/m³)

Exposure limits have not been established by NOHSC for this product.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised. No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

Eye Protection: Eye protection such as protective glasses or goggles should be worn when there is a chance of irritant levels of vapours being generated. However, it would be better to remove the vapours or avoid their generation. Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

Skin Protection: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when handling this product. The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when handling this product.

Protective Material Types: There is no specific recommendation for any particular protective material type. rubber, PVC.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Eyebaths or eyewash stations should be provided near to where this product is being used.

Physical and Chemical Properties:

Physical Description & colour: Light yellow to orange liquid

Odour: Fresh floral aroma

Boiling Point: No data.

Freezing/Melting Point: No specific data. Liquid at normal temperatures.

Volatiles: No data.

Vapour Pressure: No data.

Vapour Density: No data.

Specific Gravity: 0.866 to 0.889

Water Solubility: Insoluble.

pH: No data.

Volatility: No data.

Odour Threshold: No data.

Evaporation Rate: No data.

Coeff Oil/water distribution: No data

Autoignition temp: No data.

Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Containers should be kept dry. Keep away from sources of sparks or ignition.

Incompatibilities: strong acids, strong oxidising agents, strong reducing agents, porous materials such as zeolites and similar mineral products, rags.

Fire Decomposition: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product is unlikely to undergo polymerisation processes.

Toxicological Information

Target Organs: There is no data to hand indicating any particular target organs.

Classification of Hazardous Ingredients

Ingredient Risk Phrases

No hazardous ingredients present in hazardous concentrations.

Ecological Information

This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

Disposal Considerations

Disposal: Containers should be emptied as completely as practical before disposal. If possible, recycle containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site. Please do NOT dispose into sewers or waterways.

Transport Information

ADG Code This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Packaging Method:

Class 3 Flammable Liquids shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 2.1 (Flammable Gases where flammable liquids and flammable gases are both in bulk), 2.3 (Toxic Gases), 4.2 (Spontaneously Combustible Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances, except Flammable Liquid is nitromethane), and 7 (Radioactive Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases except where the Flammable Liquids and Flammable Gases are in bulk), 2.2 (Non-Flammable Non-Toxic Gases), 4.1 (Flammable Solids), 4.3 (Dangerous When Wet Substances), 6 (Toxic Substances, except where Flammable Liquid is nitromethane), 8 (Corrosive Substances), 9 (Miscellaneous Dangerous Goods), Foodstuffs or foodstuff empties.

Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail

AICS Australian Inventory of Chemical Substances

CAS number Chemical Abstracts Service Registry Number

Hazchem Number Emergency action code of numbers and letters that provide information to emergency services especially firefighters

IARC International Agency for Research on Cancer

NOHSC National Occupational Health and Safety Commission

NOS Not otherwise specified

NTP National Toxicology Program (USA)

R-Phrase Risk Phrase

SUSDP Standard for the Uniform Scheduling of Drugs & Poisons

UN Number United Nations Number