EXPERIENCE
THE MAGIC OF

PURE AUSTRALIAN ESSENTIAL OILS

AMAZING OIL QUALITY
DIRECT FROM PLANTATION
CUSTOMER SERVICE BEYOND THE EXPECTED

DownUnder
enterprises

Our Goals

- ✓ HIGHEST QUALITY ESSENTIAL OILS
- ✓ DIRECT FROM PLANTATION
- ✓ CUSTOMER SERVICE BEYOND THE EXPECTED

So what’s the secret to our success?

“It is not a ‘secret’ really. It comes down to our belief in the fundamentals. We keep a steady focus on our key goals which many of our customers have said make us a partner you can trust.”

Dee-Ann Prather
Founder and President
Down Under Enterprises

DownUnder enterprises

When you start working with Down Under Enterprises, you will quickly experience how we bring these goals to life. That’s our promise to you, and it is part of everything we do each day.

However we certainly do not stop there. To help us achieve these goals, we implemented a world-class cloud computing system across our global organization for all accounting, customer relationship, inventory management, and website activities. This system gives us a total view of each of our customers, including requirements, order status, batch and serial numbers. For multinationals with manufacturing facilities across many countries, we can manage them as one entity, providing better manufacturing consistency across their global footprint. We’ve streamlined shipping and logistics management in the system to deliver customer requirements on time and accurately.

Our customers even have their own log-in details to access this system, review their order status, historical transactions, download Certificates of Analysis, SDS, and review other pertinent account information.

PREMIER’S NSW EXPORT AWARDS
Export Council of Australia

2015 Category Winner
NSW Women in International Business

“One of NSW’s most prestigious and longest running award programs, the NSW’s Premier’s Export Awards publicly recognizes the talent and innovative spirit of NSW’s top exporters and their role in boosting the State and Australia’s economy. The Export Council of Australia, in conjunction with the NSW Government, announced Dee-Ann Prather as the 2015 category Winner for NSW Women in International Business.”

Purity is Paramount

With Down Under Enterprises, you can be assured you're getting the very best native Australian ingredients possible – whether it's one of our 100% pure Australian essential oils, our native carrier oils, or specialty ingredients. Down Under has full Mass Spectroscopy/ Gas Chromatography analysis conducted on each batch, on every oil. This testing is independently conducted by Southern Cross University Plant Science Labs, world renowned for their experience with essential oil testing. Batch after batch of testing our oils, these experts have never found any trace of herbicides, pesticides, or other contaminants in our oils. We are proud of this record of purity, our customers applaud us for it, and we know you will appreciate it too.

We also understand that your company – and your consumers – may require different certifications of oil purity. That is why, where we can, we offer you the choice of Conventionally Farmed, Certified Organic (e.g. NOP USDA Certified Organic), COSMOS, and Natural Products Association Certified. Please talk to us about your specific certification requirements and we will work to meet those needs.

Logistics – A Global Supply Chain

In today's business environment of lean inventory management, variable customs fees, port industrial relations delays, and even regulatory authorities (e.g. US FDA) halting shipments without warning, having a locally-based supply of direct-from-plantation Australian essential oils and carrier oils makes a lot of sense. In fact it can take a lot of risk out of your supply chain. It's the reason we implemented this business model many years ago, and the reason why so many customers trust Down Under Enterprises as their preferred vendor for pure Australian essential oils and carrier oils.

- NORTH AMERICAN WAREHOUSE
- AUSTRALIAN WAREHOUSE
- ASIAN LOCAL WAREHOUSES
- SYDNEY HEAD OFFICE

Down Under Enterprises has the experience and scale to manage simultaneous FCL, LCL, and airfreight shipments of our various stocked products. Many Australian essential oils are Dangerous Goods rated (DG Class 3, Packing Group III) for transportation purposes (governed by US DOT, IATA, IMDG, among others), requiring special training and handling procedures. Contraventions of these regulations can carry stiff penalties, even imprisonment. Down Under Enterprises has the training and procedures in place to handle and ship these oils effectively. Depending on your location and timeframe, we may be able to save your organisation from higher DG shipping rates.

And with the new Global Harmonization System (GHS) of Classifying and Labelling Chemicals coming into effect around the world, Down Under has you covered there too. We have revised all of our Safety Data Sheets (SDS) to comply with GHS requirements, and can even supply these SDS to meet your local language and labelling requirements.

For the comfort and convenience of knowing your oil is ready – in our warehouses – and will ship in a manner meeting all legal requirements, let us handle the logistics. We can deliver via common carrier, UPS/DHL, or your preferred method of transport from our warehouse to your facility in the shortest timeframe possible.

History

Down Under Enterprises was founded in 2001 by Dee-Ann Prather as a family owned and operated company in the United States to distribute wholesale, bulk Australian Tea Tree Oil. From the beginning, the Tea Tree Oil came from our family's plantations, mainly our Robel and Limeburner's plantations, reliable supply with highly consistent quality and aroma.

Since the 1850's and five generations, our family has had an extensive farming background in Australia. From our first tea tree plantation in the 1990's, our parents and our brother's family grew to run multiple plantations across the key native growing region for Tea Trees. As the global demand for Pure Australian Tea Tree Oil expanded, the number of our plantations increased and each new plantation provided greater efficiencies and higher yield plants. From this history, Down Under Enterprises has become one of the largest suppliers of 100% Pure Australian Tea Tree Oil to the United States and now around the world. Our business has grown to include oil not only sourced from family owned plantations but from plantations owned and operated by friends. Today, we obtain our Tea Tree Oil from over 635 hectares of conventionally farmed Tea Trees, with another 400+ hectares managed with USDA certified organic status. In 2016, Down Under Enterprises is developing a new plantation which will yield an additional 30,000kg of high quality tea tree oil. Called Buhlambar, "Home of Tea Tree" in local Aboriginal Bundjalung language, this plantation is available for customer visits to experience first-hand how tea trees are grown. You may even encounter one of our residents - koalas, kangaroos, and other native Australian fauna.

Buhlambar

Essential Oil Producers Association of Australia

ATTIA
Australian Tea Tree Industry Association

American Botanical Council

Natural Products Association

Orangutan Foundation International

Australian Certified Organic

COSMOS-Standard AISBL

Pure Australian Tea Tree Oil

Tea Tree Oil is an essential oil obtained from the steam distillation of the native Australian plant Melaleuca alternifolia. It has been used for thousands of years by Australian Aborigines as an effective treatment of various skin maladies. In the early twentieth century, a Sydney-based chemist, Dr. Arthur Penfold, discovered that tea tree essential oil was thirteen times stronger than carbolic acid – the standard at that time – as an antiseptic. To this day, Melaleuca alternifolia is one of the most heavily researched and cited essential oils in existence; Google Scholar references nearly 5000 citations since 1980. Research topics range from the *in vitro*

validations of its anti-microbial properties to extensive, randomized and prospective *in vivo* human studies. This ever-expanding body of evidence is likely to further the applications and demand for this natural oil. Recently, researchers in Australia even used Tea Tree Oil to synthesize graphene (single-layer carbon fiber) sheets! Tea Tree Oil's properties as an effective anti-septic, anti-bacterial, anti-fungal, anti-viral, and anti-inflammatory agent are highly valued in personal care formulations.

Down Under Enterprises has compiled a series of technical and clinical white papers which summarise the research conducted in different use cases such as, medicinal applications, hair care, skin care and oral care.

In 2014, Tea Tree Oil was approved by European Medicines Agency as a Traditional Herbal Medicine, with four defined indications for use. Notably, three of the four indications involve the use of pure, undiluted Tea Tree Oil.

- For treatment of small superficial wounds and insect bites
- For treatment of small boils (furuncles and mild acne)
- For the relief of itching and irritation in cases of mild athlete´s foot
- For symptomatic treatment of minor inflammation of the oral mucosa.

Pure Australian Tea Tree Oil is currently available worldwide as a "neat" oil and as an ingredient in a diverse range of personal care, home care, and pet care products. Down Under Enterprises is proud to be a leading supplier of this uniquely Australian product to our customers around the world.

Founded and managed by the American Botanical Council (ABC), the Adopt-an-Herb™ program has been in existence since 2008. Each adopting organization helps ensure that the most current information on each herb is available in HerbMedPro, enabling consumers, researchers, educators, media, health practitioners, government agencies, and members of industry (including retailers and other) with easy access to abstracts of the latest scientific and clinical publications on the many aspects, properties, and benefits of the adopted herb.

Down Under Enterprises has proudly adopted Tea Tree Oil in the Adopt-an-Herb program and looks forward to a strong association with the ABC to support and expand the public's knowledge of the essential oil, hydrosol, and other uses of the Australian Tea Tree (*Melaleuca alternifolia*).

ADOPT-AN-HERB
HerbMedPro™ PROGRAM

Tea Tree Seedlings

Planting

Irrigating

Harvesting

Distillation

Shipment

ATTIA

In Australia, the home of premium-quality Tea Tree Oil, the Australian Tea Tree Industry Association (ATTIA) is a not-for-profit organisation formed in 1986 as the peak body to promote and represent the interest of the Australian tea tree industry from the grower/producer of Australia Tea Tree Oil, through to the manufacturer of off-the-shelf products. ATTIA aims to develop a stable, cohesive, environmentally friendly, and internationally competitive Tea Tree Oil industry producing quality assured Tea Tree Oil that meets or exceeds international standards.

The Australian Tea Tree industry is environmentally aware and was one of the first industry bodies to adopt a policy that broadly embraces the principles of the ISO14000 environmental standards. ATTIA members must abide by this policy's stringent guidelines for the responsible production of pure Tea Tree Oil and Tea Tree Oil product. The composition of Tea Tree Oil products is determined by ISO 4730 (2004) and AS 2782-2009 Australian Standards (Oil of Melaleuca, terpinene-4-ol type].

Storage Packaging & Transport

When Tea Tree Oil is stored and transported, ATTIA Code of Practice standards ensure that the quality of the oil is not compromised. While stainless steel is the best material for long term storage and shipment of Tea Tree Oil, a select range of packaging has undergone extensive long term and accelerated testing and analysis by ATTIA.

Avoid accepting any Tea Tree Oil in aluminium flasks, mild steel drums (including EPON-lined), non-fluorinated (Level 5) HDPE or any other plastic whatsoever – it will no longer be pure and/or will exhibit accelerated oxidation. Down Under Enterprises can help you determine which container is most suitable for your requirements.

COP Quality (Code of Practice)

One of the biggest risks in strategic sourcing of natural products is identifying the source/provenence and natural purity of your ingredients. Down Under Enterprises makes this easy for you. The Australian Tea Tree Industry Association Code of Practice is a complete Quality Management System specifically written for the Tea Tree Industry. Covering everything from planting and maintenance, to harvesting,

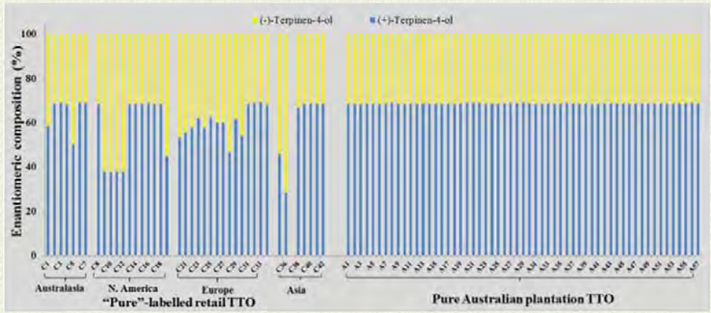
distilling, packaging, and even records management, the Code of Practice (COP) and the COP seal on our packaging, is your guarantee that our Tea Tree Oil has been produced to the highest standards of purity and consistency in the world. If your supplier does not offer COP-certified Tea Tree Oil, find out why, then talk to Down Under Enterprises. Your QA and Manufacturing team will thank you for it.

Adulteration and a New ISO Standard for Tea Tree Oil

As the effectiveness of pure Australian Tea Tree Oil has become widely recognised, a market has developed for low-cost adulterated oil, often consisting of Tea Tree Oil blended with components such as sabinene from pine oil. Some companies are also creating "Nature Identical" Tea Tree Oil, synthetically created from only 15 of the 113+ components as listed in the International Standard (ISO 4730) for Tea Tree Oil.

Manufacturers of these adulterated oils often mix the components to ensure that physical properties (e.g. optical rotation) are adjusted to conform to the standard. Detection of such oils can be difficult. These products masquerading as Tea Tree Oil have no scientific evidence to support their Safety nor their Efficacy, placing consumers at risk. Consumers using this adulterated product may unknowingly suffer detrimental experiences, turning them away from using Tea Tree Oil entirely.

ATTIA has identified Chiral Molecule Analysis as a simple test to quickly and inexpensively differentiate pure, natural Tea Tree Oil from adulterated Tea Tree Oil. This definitive testing methodology has undergone extensive validation as published by Wong, Davies, Chin, et al., in the May 2015 issue of Industrial Crops and Products (see below results). The Chiral Molecule Analysis is incorporated in the revised ISO standard for Tea Tree Oil (2016).



Tea Tree Oil chiral molecule testing validated by 57 known samples (at right) against 50 retail products claiming "Pure Australian Tea Tree Oil" (at left).

Essential Oils - Anise Myrtle

Product Name:	100% Pure Australian Anise Myrtle Oil
Botanical name:	*Syzygium anisatum*
INCI:	None issued
HS Code:	3301.29
UN Code:	Non-Hazardous
CAS No:	8008-46-6
Part of Plant Used:	Leaves and twigs
Appearance:	Clear, colorless to pale yellow mobile liquid
Aroma:	Anise, fennel or liquorice scent
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Formerly known as *Backhousia anisata* and *Anetholea anisata*, the anethole chemotype of the botanically reassigned *Syzygium anisatum* can be used as a flavoring agent in foods and beverages. Like many other plants with similar flavor qualities it acts as a digestive aid and carminative. Low amounts will suffice in most formulations as it has a very high odor and flavor intensity. Much like licorice, it is used as an expectorant and it is best added to other oils to complement and potentiate other medicinal activities. It may be used in the fragrance industry as a substitute for anise or fennel aroma.

"Anethole is regarded as an antiseptic, bactericide, cancer-preventative, carminative, dermatogenic, expectorant, fungicide, gastrostimulant and insecticide" (Webb). It lowers the sympathetic nervous system response, allowing for a greater sense of relaxation.

The methyl chavicol chemotype is toxic at high doses in mice. It is "an anesthetic, anticonvulsant, myorelaxant, cancer-preventative, fungicide, antispasmodic, a carminative and stabilizes the sympathetic nervous system, hence its antispasmodic qualities" (Webb).

Results from a study done in 2005, show that essential oils from this and other Australian plants may be valuable antimicrobial agents for use alone or incorporated into cosmetics, cleaning agents and pharmaceutical products (Wilkinson).

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Shaving and Post Wax	Hand and Body Wash	Decongestant	Perfume	
	Massage			Aromatherapy
	Hair Care			
	Oral Care			
	Lip Balm			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

Two chemotypes exist: (a) one rich in (E)-anethole (90+%) and (b) rich in methyl chavicol (60-75%), which is also known as estragole (commonly found in basil and tarragon). Minor amounts of alpha-pinene, cineole, (Z)-anethole, alpha farnesene and anisaldehyde exist in each chemotype.

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

Bowles, Joy. The Chemistry of Aromatherapeutic Oils; Allen & Unwin 2003; NSW Australia.

Webb, Mark; Bush Sense; Griffin Press 2000; Adelaide, Australia.

Wilkinson, J.M., Cavanagh, H.M.A., "Antibacterial activity of essential oils from Australian native plants", Phytotherapy Research, Volume 19, Issue 7, pp.643 - 646. July 2005.

For references on specific topics please contact us.

Essential Oils - Balm Mint Bush

Product Name:	100% Pure Australian Balm Mint Bush Oil
Botanical name:	*Prostanthera melissifolia*
INCI:	None issued
HS Code:	3301.29
UN Code:	3082 (Class 9)
CAS No:	None issued
Part of Plant Used:	Leaves
Appearance:	Clear, colorless to pale yellow liquid
Aroma:	Minty with a hint of eucalyptus
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Prostanthera is a genus of flowering plants of the mint (*Laminaceae*) family. There are about 90 species within the genus, all of which are endemic to Australia. The genus name is derived from the Greek word for 'appendage'. The species name relates to having foliage similar to *Melissa officinalis* (Lemon Balm); hence the common name. The Mint Bush family has a wide variety of variations that are often used in Australian Bush cooking.

The leaves from which the essential oil is derived are described as antibacterial, antimicrobial, antifungal and carminative. They are used externally in the treatment of colds and headaches.

An Australian study conducted in 2009 determined that essential oils from Australian native plants offer limited protection against biting mosquitoes and that a blend of essential oils (including Balm Mint) may offer commercial potential as a short-period repellent or under conditions of low mosquito abundance.

This relatively new oil may have applications for which products have not yet been developed. Based on the chemistry, anti-inflammatory uses may be established. As a member of the mint family it may also contain menthol and cineole, for which respiratory and analgesic properties may apply

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne		Athletes Foot Powder	Surface Cleanser	Perfume Material
	Deodorant		Hand Cleanser	Diffuser Mist
				Cosmetic Scent
				Insect Repellent

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Major Chemical Constituents

Aerial material of three species of *Prostanthera*, including melissifolia, was analyzed in the UK. Results show they contain three sesquiterpenes, two known compounds and a novel sesquiterpene, prostantherol. Prostantherol was identified as (rel)-1a alpha,3a beta,7a alpha,7b alpha-decahydro-4 beta-hydroxy- 1,1,4 alpha,7 alpha-tetramethylcyclopropa[a]-naphthalene on the basis of a comprehensive spectroscopic analysis.

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References

Dellar JE, et al. Phytochemistry. 1994 Jul;36(4):957-60. Antimicrobial sesquiterpenes from Prostanthera aff. melissifolia and P. rotundifolia.

Maguranyi SK, et al. J Am Mosq Control Assoc. 2009 Sep;25(3):292-300. Are commercially available essential oils from Australian native plants repellent to mosquitoes?

For references on specific topics please contact us.

Essential Oils - Buddha Wood

Product Name:	100% Pure Australian Buddha Wood Oil
Botanical name:	*Eremophila mitchellii*
INCI:	Eremophila Mitchellii Wood Oil
HS Code:	3301.29
UN Code:	Non-Hazardous
CAS No:	1429902-59-9
Part of Plant Used:	Wood
Appearance:	Thick, red brown to dark brown mobile liquid
Aroma:	Tenacious, unique, smooth, woody oak
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Eremophila mitchellii was named in 1848 by botanist George Bentham, after Sir Thomas Mitchell, who led the discovery expedition into Australia. No less than 17 species of Eremophila have roots in Aboriginal use. The species michellii is noted as having 'general medicinal purposes'

Eremophila mitchellii occurs in the arid regions of New South Wales, Queensland and South Australia. The tree, very common in Western Queensland, is often confused with *Santalum lanceolatum R. Br.*, both trees being commonly referred to as sandalwood. Initial research was done through the School of Pharmacy, Griffith University, Gold Coast campus, QLD, Australia. It is considered somewhat invasive, though native to Australia, with over 215 species.

The scented wood is burnt for its pleasant aroma. The oil has also been used for perfumery, bath, massage, diffuser, blending, and a perfume fixative. The rare sesquiterpene compounds lend anti-inflammatory properties to this rare and unique oil. This woody scented oil provides deep relaxation to body, mind and spirit. The eremophilanes reportedly inhibit P388D1 cancer cell growth in vitro.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand and Body Wash	Wound Care		Perfume
Shaving and Post Wax	Massage	Diaper Rash		Aromatherapy
	Oral Care			

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Major Chemical Constituents

The wood oil is composed predominantly of eremophilanes, a rare class of biologically active bicyclic sesquiterpenoids. Its thick viscosity belies the main components of three closely related sesquiterpene ketones – eremophilone, 2-hydroxyeremophilone, and 2-hydroxy-2-dihydroeremophilone. None of these components have been discovered before in nature.

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References

Barnes EC, et al. J Nat Prod. 2011 Sep 23;74(9):1888-93. Mitchellenes A-E, cyclic sesquiterpenes from the Australian plant Eremophila mitchellii.

Beattie, Karren D, et al. Phytochemistry, Volume 72, Issues 4–5, April 2011, Pages 400–408. Chemical composition and cytotoxicity of oils and eremophilanes derived from various parts of Eremophila mitchellii Benth. (Myoporaceae)

Richmond, G.S. J. Adelaide Bot. Gard. 15(2): 101-107(1993). A Review of the use of Eremophila (Myopoiraceae) by Australian Aborigines,

For references on specific topics please contact us.

Essential Oils - Blue Cypress

Product Name:	100% Pure Australian Blue Cypress Oil
Botanical name:	*Callitris intratropica*
INCI:	Callitris Intratropica Wood Oil
HS Code:	3301.29
UN Code:	3082 (Class 9)
CAS No:	187348-13-6
Part of Plant Used:	Wood and Bark
Appearance:	Clear blue liquid
Aroma:	Smoky, liquorice, woody characteristics
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional, EcoCert, COSMOS

Therapeutic Properties

Blue Cypress' beautiful color and therapeutic properties are resulting in this oil becoming more frequently used in the personal care and cosmetics industries. This Cypress family member contains quaiazulene, providing anti-inflammatory properties offered in other blue oils such as yarrow, German chamomile and tansy. Blue cypress oil offers a middle to base note in fragrance blends, slowing the evaporation of top notes. It blends well with other wood notes and citrus scents.

Blue cypress was a traditional medicine for thousands of years, lending credence to its current day uses. This native Australian tree was used as a skin wash for cuts and sores, to soothe abdominal cramping and as an analgesic and insect repellent. As a grounding base note, it is also useful for those of a nervous disposition, providing a calming and reassuring effect. An immune tonic, antibacterial and antiseptic, it helps treat and prevent infection.

This tropical conifer produces clear annual growth rings, and has been shown to be potentially useful for understanding past climate variability in northern Australia. Unique among ancient trees, this prehistoric aromatic offers soothing effects on body, mind and spirit"

"Anecdotal data has shown the oil to have good anti-inflammatory and pain–relieving properties against allergic hives, insects (like sand fly, bee, wasp, mosquito), rheumatoid arthritis, general joint pain and swelling. It has also been shown to be an anti-irritant, soothing nappy rash and reducing erythema in a small trial. The oil exhibits anti-viral properties, being particularly effective against common warts (verruca), shingles (herpes zoster) and cold sores (herpes simplex). The oil also has been used for burns where it has significantly reduced the healing time and pain associated with the injury" (Webb).

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Massage	Wound Care		Perfume
Dermatitis/ Eczema		Diaper Rash		Insect Repellant
Shaving & Post Wax		Muscle Pain		Aromatherapy
		Cold Sore		
		Skin Warts		

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

Major constituents include guaiol (12-26%) and myrtenic acid (0.6-4%).

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References

Bowles, Joy. The Chemistry of Aromatherapeutic Oils 2003, Griffin Press, S Australia.

Drew DM, et al. Tree Physiol. 2011 Sep;31(9):953-64. The development of seasonal tree water deficit in Callitris intratropica.

Schnaubelt, Kurt. Medical Aromatherapy; Frog Ltd, 1999, Berkeley, CA.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - White Cypress (Leaf)

Product Name:	100% Pure Australian White Cypress (Leaf) Oil
Botanical name:	*Callitris columellaris*
INCI:	None issued
HS Code:	3301.29
UN Code:	1197
CAS No:	192526-11-7
Part of Plant Used:	Leaves and Twigs
Appearance:	Clear, colorless to pale yellow mobile liquid
Aroma:	Cypress, camphor
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

White Cypress Oil is obtained via steam distillation from the leaves and wood of Callitris columellaris. It blends well with citrus or floral notes, but may compete with other oils of strong odor personality.

The essential oil is relatively new on the commercial market though its investigation began over a century ago. The timbers are hard and dense and are renowned for their resistance to the Australian termite population (due to the essential oil in the heartwood). It has been mainly used for fragrance and flavor, and aromatherapists prize it for its grounding and stabilizing properties to calm an agitated mind and body.

A 2007 research paper notes that 18 species and four subspecies of the leaf essential oils were investigated by the Australian government; all show applications as insecticides, antimicrobial agents and fragrances (Brody, et al.). These authors state that most of the published work on the genus Callitris has been on the extracts of the wood, but note that their research is the first document to investigate all known Australian species focused on the leaf oil. Little is written on the therapeutic properties of the leaf oil, though with the high proportion of limonene we can extrapolate that it could well have bile stimulating properties (Bowles). Its solvent qualities also point to applications for oily or clogged skin.

Use both the leaf and the wood oil sparingly from both a therapeutic and fragrance standpoint.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne			Surface Disinfectant	Insecticide
Cleanser			Cleanser	
Dermatitis/ Eczema			Detergent	

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Major Chemical Constituents

Major constituents include α-pinene (28-45%), limonene (18-30%), Bornyl acetate (4-10%) and β-cayrophyllene (1-3%).

FDA Disclaimer

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References

Brody, et al. Chemistry of the Australian Gynmosperms. Part IX. The Leaf Oils of the Australian Members of the Genus Callitris (Cupressaceae). J. Essent. Oil Res., 19, 57-71 (January/February 2007).

Bowles, Joy; The Chemistry of Aromatherapeutic Oils, 2003. Allen & Unwin, NSW.

Mark WWebb; Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - White Cypress (Wood)

Product Name:	100% Pure Australian White Cypress (Wood) Oil
Botanical name:	*Callitris columellaris*
INCI:	None issued
HS Code:	3301.29
UN Code:	1197
CAS No:	192526-11-7
Part of Plant Used:	Wood and Bark
Appearance:	Colorless to pale yellow-green mobile liquid
Aroma:	Fresh eucalyptus, pine and mint
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

White Cypress Oil is obtained via steam distillation from the leaves and wood of Callitris columellaris. It blends well with citrus or floral notes, but may compete with other oils of strong odor personality.

The essential oil is relatively new on the commercial market though its investigation began over a century ago. The timbers are hard and dense and are renowned for their resistance to the Australian termite population (due to the essential oil in the heartwood). It has been mainly used for fragrance and flavor, and aromatherapists prize it for its grounding and stabilizing properties to calm an agitated mind and body.

A 2007 research paper notes that 18 species and four subspecies of the leaf essential oils were investigated by the Australian government; all show applications as insecticides, antimicrobial agents and fragrances (Brody, et al.). These authors state that most of the published work. on the genus Callitris has been on the extracts of the wood, but note that their research is the first document to investigate all known Australian species focused on the leaf oil. Little is written on the therapeutic properties of the leaf oil, though with the high proportion of limonene we can extrapolate that it could well have bile stimulating properties (Bowles). Its solvent qualities also point to applications for oily or clogged skin.

Use both the leaf and the wood oil sparingly from both a therapeutic and fragrance standpoint.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne			Surface Disinfectant	Insecticide
Cleanser			Cleanser	
Dermatitis/ Eczema			Detergent	

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Major Chemical Constituents

Major constituents include guaiol (18-26%), eudesmols (13-14.6%), selinenes (10.8-13%), citronellic acid (3.5-14.5%) and 6-methyl-5-hepten-2-one (2.5-12.5%). The minor components include methyl geranate, didhydrocolumellarin, callitrisin and columellarin.

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References

Brody, et al. Chemistry of the Australian Gynmosperms. Part IX. The Leaf Oils of the Australian Members of the Genus Callitris (Cupressaceae). J. Essent. Oil Res., 19, 57-71 (January/February 2007).

Bowles, Joy; The Chemistry of Aromatherapeutic Oils, 2003. Allen & Unwin, NSW.

Mark WWebb; Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Eucalyptus, Australiana

Product Name:	100% Pure Australian Eucalyptus Australiana Oil
Botanical name:	*Eucalyptus radiata*
INCI:	Eucalyptus Radiata Leaf Oil
HS Code:	3301.29
UN Code:	1169
CAS No:	92201-64-4
Part of Plant Used:	Leaves and twigs
Appearance:	Clear, colorless to pale yellow mobile liquid
Aroma:	Eucalyptus aroma with slight citrus overtones
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional, USDA Organic

Therapeutic Properties

The "king" of all Eucalyptus species – the aroma of Eucalyptus Australiana (radiata) is deep, round and penetrating. It is sometimes called Narrow Leaf Peppermint Gum or *Eucalyptus radiata var. Australiana.*

The monoterpene, terpene alcohol and cineole synergy of this essential oil makes it a perfect combination for cold and flu. It has effective properties as a mucolytic and expectorant for many respiratory conditions through inhalation or topical use. It is useful in viral conditions as well as bacterial problems such as sinus infection. It is safe in children's cold remedies used sparingly in the bath or as a chest rub. It is also good for treating inflammation of muscle and other tissue. It has many useful qualities as an antimicrobial agent.

The 1,8-cineol content increases the dermal absorption of other constituents in a blend by as much as 95 times." (Webb)

"**1,8-cineole** – anti-bronchitic, anticatarrhal, antiseptic, antitussive, CNS-stimulant, expectorant, and respiratory anti-inflammatory.

Alpha-pinene – anti-inflammatory, cancer-preventive, can cause skin irritation to sensitive skin.

Alpha-terpineol – antiallergenic, anti-asthmatic, antiseptic, antitussive, bactericide, expectorant.

Limonene – anticancer, antiseptic, bactericide, cancer-preventive, expectorant, fungistatic, sedative, viricide.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand & Body Wash	Decongestant	Surface Disinfectant	Perfume
	Massage	Muscle Pain	Cleaner	Aromatherapy
	Hair Care	Foot Spray	Room Freshener	
			Detergent	

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

The major constituent is 1,8-cineole (>70%).

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

Battaglia, Salvatore. The Complete Guide to Aromatherapy; International Center for Holistic Aromatherapy, 2003; Brisbane, Australia.

Schnaubelt, Kurt. Medical Aromatherapy; Frog Ltd, 1999, Berkeley, CA.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Eucalyptus, Blue Leaved Mallee

Product Name:	100% Pure Australian Blue Leaved Mallee Gum Oil
Botanical name:	*Eucalyptus polybractea*
INCI:	None issued
HS Code:	3301.29
UN Code:	1169
CAS No:	91771-67-4
Part of Plant Used:	Leaves and twigs
Appearance:	Clear, colorless to pale yellow liquid
Aroma:	Fresh camphor like
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional, USDA Organic

Therapeutic Properties

Eucalyptus Blue Mallee is produced in commercial quantities and offers reliability of quality and quantity. This mucolytic essential oil is often employed in respiratory blends and insect repellants, especially when combined with synergistic oils. It can be used externally combined with other therapies for urinary tract disorders. It is antiviral and antibacterial and useful in bath blends for cold and flu.

"1,8-cineole – antibronchitic, anticatarrhal, antiseptic, antitussive, CNS-stimulant, expectorant, and respiratory anti-inflammatory"; used for the relief of head colds, rheumatism, muscular pain (in the form of liniments), and as expectorant in cases of bronchitis, added to cough syrups." (Webb)

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
	Hand & Body Wash	Decongestant	Surface Disinfectant	
	Massage	Muscle Pain	Cleanser	
		Foot Spray	Room Freshener	
			Detergent	

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

The major constituent is 1,8-cineole (80-85%).

FDA Disclaimer

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References

Battaglia, Salvatore. The Complete Guide to Aromatherapy; International Center for Holistic Aromatherapy, 2003; Brisbane, Australia.

Boland, D.J. et al., Eucalyptus Leaf Oils - Use, Chemistry, Distillation and Marketing' Inkata Press, Melbourne (1991).

Harden, G.J., Flora of New South Wales, Volume 2; New South Wales University Press, 1993.

Schnaubelt, Kurt. Medical Aromatherapy; Frog Ltd, 1999, Berkeley, CA.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Eucalyptus, Lemon Scented

Product Name:	100% Pure Australian Lemon Scented Eucalyptus Oil
Botanical name:	*Eucalyptus citriodora*
INCI:	Eucalyptus Citriodora Oil
HS Code:	3301.29
UN Code:	3082 (Class 9)
CAS No:	129828-24-6
Part of Plant Used:	Leaves and twigs
Appearance:	Colorless to pale yellow mobile liquid
Aroma:	Fresh, citronella-like
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Eucalyptus citriodora is used in the perfume industry to manufacture other aroma chemicals, due to its rich citronellal content. Lemon Scented Eucalyptus also acts as a wonderful insect repellent, rivaling DEET in some products.

Carroll, *et al.* reported on a technique to produce para Menthane-3,8 diol (PMD) in large quantities from the essential oil of *Eucalyptus citriodora*. PMD is endorsed by the US Centers for Disease Control (CDC) as as effective non-DEET repellent against mosquito species *Aedes, Anopheles, Culex,* and *Ochlerotatus.*

Psychologically it can be very soothing and calming. Physiologically it has antiseptic, analgesic, anti-inflammatory, insect repellent and sedative properties and could be considered useful for colds and infections, athlete's foot, rheumatism and muscular aches and pains. It is generally considered non-toxic, non-irritating and non-sensitizing. It is often used as a fragrance component (instead of *Eucalyptus globulus)* in perfumes, detergents and soaps.

"Antiseptic, antiviral, bactericidal, antifungal, analgesic, hypertensive, deodorant, expectorant, insecticide" (Webb).

The significant amount of citronellal, in the functional family of aldehydes, offers significant sedation and anti-inflammatory effects. It has also been noted that *Eucalyptus citriodora* appears to have bacteriostatic activity towards *Staphylococcus aureus* due to synergism between citronellol and citronellal present in the oil.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand & Body Wash	Foot Spray	Surface Disinfectant	Perfume
Oily Skin	Haircare		Cleanser	Insect Repellant
	Deodorant		Room Freshener	Aromatherapy
			Detergent	

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

The major constituent is citronella (>75%).

FDA Disclaimer

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References

Battaglia, Salvatore. The Complete Guide to Aromatherapy; International Center for Holistic Aromatherapy, 2003; Brisbane, Australia.

Carroll SP, Loye J, J Am Mosquito Control Assoc, 2006; PMD, A Registered Botanical Mosquito Repellent with DEET-like Efficacy, 22(3):507-514.

Mulyaningsih S, et al. Pharm Biol. 2011 Sep;49(9):893-9. Antibacterial activity of essential oils from Eucalyptus and of selected components against multidrug-resistant bacterial pathogens.

Schnaubelt, Kurt. Medical Aromatherapy; Frog Ltd, 1999. Berkeley, CA.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Eucalyptus, Lemon Scented Iron Bark

Product Name:	100% Pure Australian Lemon Scented Iron Bark Eucalyptus Oil
Botanical name:	*Eucalyputus staigeriana*
INCI:	None issued
HS Code:	3301.29
UN Code:	2319
CAS No:	91771-69-6
Part of Plant Used:	Leaves and twigs
Appearance:	Clear, colorless to pale yellow liquid
Aroma:	Subtle, well rounded lemon aroma
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Also known as Australian Lemon Balm, *Eucalyptus staigeriana* was the flavor ingredient for lemon cordial, an Australian drink similar to lemonade. It has been used in perfumery, toilet preparations, and some flavorings. Lemon Scented Iron Bark is also effective in masking odors. Its lemony scented profile provides a more pleasant aroma than other more 'medicinal smelling' Eucalyptus oils.

"The major components methyl geranate, geranyl acetate, and beta-phellandrene are all non-toxic, non-irritant, and have uses in perfumery. The citral components are said to be anti-infectious, anti-viral, antiseptic, expectorant, anti-inflammatory and a digestive stimulant" (Webb).

Manufacturers looking for a unique eucalyptus product which does not exhibit the intense, medicinal notes of *Eucalyptus globulus* would find this oil appealing.

Major Chemical Constituents

Major constituents include linalool (30-50%) and citral (30-40%).

FDA Disclaimer

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Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Massage	Wound Care	Room Freshener	Perfume
		Decongestant		
		Foot Spray		

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

References

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Eucalyptus, Peppermint Gum

Product Name:	100% Pure Australian Eucalyptus Peppermint Gum Oil
Botanical name:	*Eucalyptus dives*
INCI:	Eucalyptus Dives Leaf/ Twig Oil
HS Code:	3301.29
UN Code:	1169
CAS No:	90028-48-1
Part of Plant Used:	Leaves and twigs
Appearance:	Clear, colorless to pale yellow mobile liquid
Aroma:	Typical eucalyptus aroma with minty undertones
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Peppermint Gum is recommended primarily for respiratory infections. It is used with equal parts Tea Tree and Lavender Tea Tree (Rosalina) for an aromatic profusion blend for direct application to the chest and back of sufferers of chronic bronchitis or acute bronchial infection. Helps to slow breathing, useful in anti-asthma applications, and is a bronchial dilator. It is also useful for unproductive coughs.

Synthetic menthol is derived from piperitone in this chemotype. Combines well with other Australian oils such as Kunzea, Lemon Myrtle and Rosalina for an effective respiratory blend.

"piperitone – a ketone that is known to be anti-asthmatic and herbicidal

1,8-cineole – anti-bronchitic, antiseptic, antitussive, CNS-stimulant, expectorant, and respiratory anti-inflammatory

alpha-pinene – anti-inflammatory, cancer-preventive, can cause skin irritation to sensitive skin

alpha-phellandrene – said to be hyperthermic and can irritate skin, readily absorbed via skin, ingestion may cause vomiting and diarrhea, also a known insectiphile

para-cymene - is known to be antifungal, antiviral, anti-flu, analgesic, anti-rheumatic, fungicidal, insectifugal" (Webb).

Major Chemical Constituents

Major constituents include piperitone (30-60%) and α-phellandrene (20-35%).

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
		Decongestant		Aromatherapy

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

References

Battaglia, Salvatore. The Complete Guide to Aromatherapy; International Center for Holistic Aromatherapy, 2003; Brisbane, Australia.

Schnaubelt, Kurt. Medical Aromatherapy; Frog Ltd, 1999, Berkeley, CA.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - White Iron Bark (Gully Gum)

Product Name:	100% Pure Australian Eucalyptus White Iron Bark Oil
Botanical name:	*Eucalyptus smithii*
INCI:	Eucalyptus Smithii Leaf Oil
HS Code:	3301.29
UN Code:	1169
CAS No:	91771-68-5
Part of Plant Used:	Leaves
Appearance:	Colorless to pale yellow mobile liquid
Aroma:	Characteristic eucalyptus aroma though slightly milder
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Gully Gum (*Eucalyptus smithii*) typically contains 65-70% of 1,8 cineole, accentuating its expectorant and antimicrobial properties. It has a warming effect on the muscles and can be used to increase circulation for pain or lethargy. Used for the relief of head colds, rheumatism, muscular pain and as an expectorant in cases of bronchitis or other lung congestion.

This species is considered best for children (over 3), the elderly, or for longer term use due to its lower cineole content. It has been studied with positive results for inhalation treatment of chronic and/ or recurrent upper respiratory tract infections.

"1,8-cineole – anti-bronchitic, anticatarrh, antiseptic, antitussive, CNS-stimulant, expectorant, and respiratory anti-inflammatory" (Webb).

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne				Insect Repellant
Oily Skin	Massage Oil			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

The major constituent is 1,8-cineole (65-70%).

FDA Disclaimer

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References

Battaglia, Salvatore. The Complete Guide to Aromatherapy; International Center for Holistic Aromatherapy, 2003; Brisbane, Australia.

Bowles Joy. The Chemistry of Aromatherapeutic Oils; Allen & Unwin 2003; NSW Australia.

Camporese, A., In vitro activity of Eucalyptus smithii and Juniperus communis essential oils against bacterial biofilms and efficacy perspectives of complementary inhalation therapy in chronic and recurrent upper respiratory tract infections. Infec. Med. 2013 Jun 1;21(2):117-124.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Eucalyptus, Strawberry Gum

Product Name:	100% Pure Australian Strawberry Gum Oil
Botanical name:	*Eucalyptus olida*
INCI:	None issued
HS Code:	3301.29
UN Code:	3082 (Class 9)
CAS No:	None issued
Part of Plant Used:	Leaves and twigs
Appearance:	White to translucent crystalline
Aroma:	Sweet, balsamic with fruity undertones, reminiscent of cinnamon and strawberry
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Eucalyptus olida, commonly known as Strawberry gum is a fairly unusual essential oil, not commonly found on the commercial market. Technically a resin at room temperature rather than a oil, *Eucalyptus olida* was initially wild harvested, but plantations now supply the current industry demand.

Methyl cinnamate, an aromatic ether, is found in a variety of fruits and herbs such as tarragon, Sichuan pepper, galangal and some species or varieties of basil. Methyl cinnamate is the methyl ester of cinnamic acid.

Research shows it has high antioxidant activity. This essential oil, derived from the leaf of *Eucalyptus olida* is used in flavoring and perfumery.

The whole leaf is used as a dried spice product in bush food cooking, especially with fruit and in herbal teas. In the Australian native foods industry several trade names are used, including 'olida' and 'forestberry herb'. It may be employed as a digestive aid with therapeutic properties offering a balancing, anti-spasmodic, sedative activity for the nervous system, and for conditions of anxiety and depression.

Major Chemical Constituents

The major constituent is methyl cinnamate (>95%).

FDA Disclaimer

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Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne				Insect Repellant
Oily Skin				Massage Oil

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

References

Boland, D.J., Brophy, J.J., and A.P.N. House, Eucalyptus Leaf Oils, 1991.

PlantNET, NSW Flora Online, Eucalyptus olida profile.

Coppen, John; Eucalyptus: The Genus Eucalyptus. CRC Press 2004.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

Zhao, J., Agboola, S., Functional Properties of Australian Bushfoods - A Report for the Rural Industries Research and Development Corporation, 2007, RIRDC Publication No 07/030.

For references on specific topics please contact us.

Essential Oils - Fragonia™

Product Name:	100% Pure Australian Fragonia™ Oil
Botanical name:	*Agonis fragrans*
INCI:	Agonis Fragrans Branch/Leaf Oil
HS Code:	3301.29
UN Code:	1169
CAS No:	934621-96-2
Part of Plant Used:	Terminal branches
Appearance:	Colorless to pale yellow liquid
Aroma:	Fresh, cineolic odor with slight spicy cinnamon tonality and sweet balsamic undertones
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Fragonia is a 100% pure essential oil originating in Western Australia. Of particular interest, the constituents of the oil comprise 3 main functional groups – monoterpenes, an oxide, and monoterpenols – which are in near perfect balance. It is this balance that caught the attention of Dr. Penoel, one of the world's foremost experts on aromatherapy and essential oils.

When first experiencing this oil in 2008, Dr Penoel referred to Fragonia's structure as having the "Golden Triangle – the symbol of balance and harmonization.

Fragonia is the result of years of efforts by Western Australian essential oil pioneers John and Peta Day, who identified the plant *Agonis fragrans* as having excellent potential as the basis for a new essential oil. Following much painstaking research and field studies of this native Australian plant, the Day's identified the variety with the most attractive aromatic properties. It is this variety that they named Fragonia and established its trademark.

They initiated propagation activities, produced the essential oil from the terminal branches, and began sharing the benefits of this plant with the world. The pleasing aroma makes it an effective substitute for those wanting to avoid Tea Tree Oil. Anecdotally, Fragonia may relieve jet lag.

Traditional Chinese Medicine characterizes this oil as being balancing to both overly yin and yang conditions.

Major Chemical Constituents

Major constituents include 1,8-cineole (25-35%), α-pinene (20-30%), linalool (10-15%) and α-terpineol (5-8%).

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand and Body Wash	Diaper Rash	Surface Disinfectant	Aromatherapy
Cleanser	Massage	Decongestant	Room Freshener	Diffusion
Shaving & Post Wax	Hair Care	Muscle Pain	Detergent	Perfumery
	Oral Care	Foot Spray		
	Feminine Care	Anifungal prep for Candida		
	Lip Balm	Antispetic		
	Deodorant	Wound Healing		
		Respiratory		

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

Penoel, Daniel, MD. Interview for ABP (Australian Botanical Products) Newsletter , Oct. 22, 2011.

Webb, Mark; Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Kunzea

Product Name:	100% Pure Australian Kunzea Oil
Botanical name:	*Kunzea ambigua*
INCI:	Kunzea Ambigua Branch/Leaft/Twig Oil
HS Code:	3301.29
UN Code:	3082 (Class 9)
CAS No:	97553-36-1
Part of Plant Used:	Leaves and twigs
Appearance:	Pale yellow mobile liquid
Aroma:	Pleasant scent with clean, fresh invigorating undertones
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Native to Northern Tasmania, traditional uses of Kunzea include treatment of ticks and other mites, insects, etc., hence the common name of Tick Bush.

The low percentage of cineole makes it skin friendly, however those with sensitive skin are advised to patch-test before use.

The chemical composition allows for deep and effective dermal penetration. Spot application of undiluted oil is generally well tolerated and useful for insect bites, cuts, and minor burns, producing immediate relief from pain, itching and irritation. It is useful in conditions of inflammation or respiratory problems. This relaxing essential oil reduces stress and mild anxiety or depression. It can provide relief from flu symptoms and is used to treat eczema and other skin conditions.

Microbial testing showed effective activity against *Staphylococcus aureus, Pseudomonas aeruginosa, E. coli,* and *Candida albicans.* A research paper from the UK showed insecticidal activity comparable to natural pyrethrum extract.

"Anecdotal feedback from users of the oil has shown it to be helpful in the treatment of the following conditions: eczema, dermatitis, rash, under nail infections and leg ulcers, and most helpful for the treatment of chilblains. The oil has also been found to ease the pain from insect bites, minor burns, recurring shingles and migraine, headache. Other uses include as an insect repellent, a room deodorizer in a nursing home environment, inclusion on a topical bruise and inflammation preparation, for its effect in promoting repair of soft tissue injuries, such as strains and sprains and for the control of persistent tinea." (Webb).

Kunzea Oil is registered with the Australian Therapeutic Goods Administration (AUSTL 72143) for:

- The temporary relief of arthritis pain
- Relief of influenza symptoms
- Relief of muscular aches and pains
- Assistance with nervous tension, stress and mild anxiety
- Temporary relief of rheumatism pain

Major Chemical Constituents

Major constituents include α-pinene (40-65%), 1,8-cineole (10-25%), globule (5-20%) and viridifloral (5-20%).

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Dermatitis/ Eczema	Massage	Wound Care	Surface Disinfectant	Insect Repellent
Shaving & Post Wax		Decongestant	Room Freshener	Aromatherapy
		Muscle Pain		

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FDA Disclaimer

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References

Khambay BP, et al. Chemistry. 2002 Jan;59(1):69-71. An insecticidal mixture of tetramethylcyclohexenedione isomers from Kunzea ambigua and Kunzea baxterii.

Penoel, Daniel, MD. Dr. Daniel Penoel's Newsletter, August 15th 2007.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Honey Myrtle

Product Name:	100% Pure Australian Honey Myrtle Oil
Botanical name:	*Melaleuca teretifolia*
INCI:	Melaleuca Teretifolia Branch / Leaf Oil
HS Code:	3301.29
UN Code:	3082 (Class 9)
CAS No:	None issued
Part of Plant Used:	Terminal branches
Appearance:	Colorless to pale yellow liquid
Aroma:	Sweet, fresh & sparkling citrus character with slight herbaceous twist
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Sometimes called 'Banbar' or "Marsh Honey Myrtle" this relative of tea tree is native to Southwestern Australia. The genus name derivation is quite interesting: *Melaleuca* from the Greek "melas", meaning black and "leukos", meaning white; referring to black marks on the white trunks of some species due to fire. The species name, teretifolia is from Latin "teres", meaning rounded; and "folius" meaning leaf, referring to the leaves of this species which are round in cross section.

In perfumery it is considered a top to middle note scent and blends well with citrus and herbaceous aromas.

An aged oil can contribute to irritancy. This essential oil is best stored in cold conditions for extending the shelf life to about three years. Its attributes include being useful against microbes, bacteria, fungus, and viruses. Unlike its relatives, Tea Tree, Niaouli and Lavender Tea Tree (Rosalina), this unique oil has the highest citral content of all the Melaleucas, contributing to its antimicrobial and antifungal activity. Like other oils prevalent with the constituent 1,8 cineole, Honey Myrtle is also an effective antimicrobial, especially for respiratory problems. As with many other Australian oils this is a good insecticide ingredient. It can also be used for skin problems, without fear of photosensitizing compounds found in citrus oils, especially cold pressed lemon oil. As a citrus note, its aroma is uplifting to body, mind and spirit. It can help invigorate and overcome lethargy while lightening the mood.

Major Chemical Constituents

The major constituent is citral (>60%).

FDA Disclaimer

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Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
		After Bite Creams	Hand and Surface Sanitizer	Insect Repellent
		Antifungal Preparations	Room Deodorizer	Aromatherapy
		Antiseptic		
		Respiratory Mucolytic		
		Calmative Agent		

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

References

Bowles, Joy. The Chemistry of Aromatherapeutic Oils, 2003; Griffin Press, S Australia.

Hendry ER, et al. J Antimicrob Chemother. 2009 Dec; 64(6):1219-25. Antimicrobial efficacy of eucalyptus oil and 1,8-cineole alone and in combination with chlorhexidine digluconate against microorganisms grown in planktonic and biofilm cultures.

Southwell, Ian A, et al. Journal of Essential Oil Research Sep2003, Vol. 15 Issue 5, p339. Melaleuca teretifolia Chemovars: New Australian Sources of Citral and 1,8-Cineole.

For references on specific topics please contact us.

Essential Oils - Lavender, Australian

Product Name:	100% Pure Australian Lavender Oil
Botanical name:	*Lavandula angustifolia*
INCI:	Lavandula Angustifolia (Lavender) Oil
HS Code:	3301.29
UN Code:	3082 (Class 9)
CAS No:	8000-28-0
Part of Plant Used:	Fresh flowering tops
Appearance:	Clear, colorless to pale yellow mobile liquid
Aroma:	Sweet floral herbaceous note with balsamic woody undertones
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Lavender has a well-deserved reputation as being the most versatile and popular essential oil; no wonder the well-known adage applies: “when in doubt, use Lavender”. It is often considered the ‘mother’ of all essential oils and its use dates back to the beginning of recorded history. The Latin word from which it is derived, *Lavare*, means to wash. It has been used for cleaning and disinfecting before there was research to support those use.

It is antibacterial, antifungal, calmative (muscle relaxing), sedative, anti-depressive, and effective for burns and insect bites. It has a harmonizing effect, balancing both sympathetic and parasympathetic nervous systems. It is replete with clinical research.

PubMed lists nearly 1,800 research papers on this essential oil; clearly well studied for its therapeutic potential. Its antidepressant and antianxiety research is well known. Cosmetically, there is no skin condition for which it is not useful, from acne and rash to diaper irritation and sun damage. Insect itching and swelling stops almost immediately upon application.

A French study compared Lavender with four other essential oils and found that Lavender was the only oil to consistently elicit a feeling of ‘happiness’. When these factors are combined with the benefits of touch, as with massage, it is especially effective in reducing stress, a major trigger for many health problems. Lavender oil is active against many species of bacteria and fungi, due to the geraniol and linalool, aromatic constituents of the oil. The calming effects are attributed to the abundant esters.

The lavender from Down Under Enterprises is a true French lavender (Lavandula angustifolia). Established in 1923, the lavender farm was created using seeds from France which were specifically selected as the “best of the best” of French varietals. Since then, no hybridization has occurred, due to the isolation of this farm in Tasmania, resulting in it being considered the most pure French lavender in the world. A well-known aromatherapist has labelled this ‘perfume grade’ lavender as the best lavender in the world!

Australian Lavender has little to no cineole or camphor, making it extra gentle to skin.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand & Body Wash	Wound Care	Surface Disinfectant	Perfume
Cleanser	Massage	Diaper Rash	Cleaner	Aromatherapy
Moisturizer	Hair Care	Muscle Pain	Detergent	
	Femanine	Foot Spray		
		Cold Sore		

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

Major constituents include linalool (33.5-43.5%) and linalyl acetate (26.1-38.1%). The minor components include 1,8-cineole, lavandulol and lavandulyl acetate.

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

Battaglia, Salvatore. The Complete Guide to Aromatherapy; International Center for Holistic Aromatherapy, 2003; Brisbane, Australia.

de Rapper, S, et al. The In Vitro Antimicrobial Activity of Lavandula angustifolia Essential Oil in Combination with Other Aroma-therapeutic Oils. Evid Based Complement Alternat Med. 2013;2013:852049.

Schnaubelt, Kurt. Medical Aromatherapy; Frog Ltd, 1999. Berkeley, CA.

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Lemon Myrtle

Product Name:	100% Pure Australian Lemon Myrtle Oil
Botanical name:	*Backhousia citriodora*
INCI:	Backhousia Citriodora Leaf Oil
HS Code:	3301.29
UN Code:	3082 (Class 9)
CAS No:	84775-80-4
Part of Plant Used:	Leaves and twigs
Appearance:	Clear light yellow, mobile liquid
Aroma:	Lemon, fresh, zesty and uplifting
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional, USDA Organic, EcoCert, COSMOS

Therapeutic Properties

Research published in 2003 showed that Lemon Myrtle (*Backhousia citriodora*) offers significant antibacterial and antifungal activity against seven bacteria and MRSA. Also cited is its potential as an antiseptic or surface disinfectant or for inclusion in foods as a natural antimicrobial agent, even noting its superiority to Tea Tree Oil. A 2002 research paper investigated the antimicrobial and toxicological properties of Lemon Myrtle. It was shown to possess significant antimicrobial activity against the organisms *Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa, Candida albicans, methicillin-resistant S. aureus (MRSA), Aspergillus niger, Klebsiella pneumoniae* and *Propionibacterium acnes* comparable to its major component-citral. This paper also noted that a product containing 1% Lemon Myrtle oil was found to be low in toxicity and could potentially be used in the formulation of topical antimicrobial products.

Follow up research by the same authors was done in 2003, wherein they studied the *in vitro* percutaneous absorption of the essential oil of Lemon Myrtle. Though further research is needed, the combination of the methodologies used enabled the generation of data that could be applied for a comprehensive evaluation of the toxicity effects of Lemon Myrtle oil for topical application.

"Therapeutically, citral has been shown to exhibit sedative, anti-bacterial, antiseptic, anti-viral, and anti-fungal properties. Aldehydes and particularly citral have long been considered to have anti-tumour properties, though the few studies carried out have proven to be inconclusive." (Webb).

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand and Body Wash	Foot Spray	Surface Disinfectant	Perfume
Cleanser	Hair Care		Cleanser	Preservative
	Oral Care		Room Freshener	Aromatherapy
	Lip Balm		Detergent	
	Deodorant			

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This oil is a very effective anti-microbial, possessing excellent bacteriocidal (gram positive and negative) properties which support its potential use as a 100% natural cosmetic preservative. Extensive studies are underway to determine its suitability for this application.

Major Chemical Constituents

The major constituent is citral (>90%).

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

Hayes AJ, Markovic B. Food Chem Toxicol. 2002 Apr;40(4):535-43. Toxicity of Australian essential oil Backhousia citriodora (Lemon Myrtle). Part 1. Antimicrobial activity and in vitro cytotoxicity.

Hayes AJ, Markovic B. Food Chem Toxicol. 2003 Oct;41(10):1409-16. Toxicity of Australian essential oil Backhousia citriodora (Lemon Myrtle). Part 2. Absorption and histopathology following application to human skin.

Webb, Mark; Bush Sense; Griffin Press 2000; Adelaide, Australia.

Wilkinson, JM, et al. J Agric Food Chem 2003 Jan 1;51(1):76-81. Bioactivity of Backhousia citriodora: antibacterial and antifungal activity.

For references on specific topics please contact us.

Essential Oils - Manuka

Product Name:	100% Pure New Zealand East Cape Manuka Oil
Botanical name:	*Leptospermum scoparium*
INCI:	Leptospermum Scoparium Branch/Leaf Oil
HS Code:	3301.29
UN Code:	Non-Hazardous
CAS No:	2198-28-87-2
Part of Plant Used:	Leaves and terminal branches
Appearance:	Clear yellow, slightly viscous oil
Aroma:	Spicy, herbaceous and fresh
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Manuka oil is considered the 'tea tree' of New Zealand where its antimicrobial properties are well established. It has a history of use by the indigenous population; the Maori tribe used it for wounds, cuts, sores and skin diseases. Manuka honey has legendary therapeutic properties; especially researched for immunity, wound healing and resistant ulcerations.

Manuka oil is useful for its analgesic, antibacterial (especially and exceedingly so for gram negative bacteria), antifungal, anti-inflammatory, deodorant, expectorant, immune tonic, insecticidal and sedative properties. Though the gram positive antibacterial properties are slightly lower for this oil than for tea tree, it more than compensates with a more pleasing fragrance profile while maintaining many similar uses. It treats most skin disorders including ringworm, athlete's foot, acne, ulcers, wounds, cuts and abrasions. It is good for bites and stings and has the ability to reduce irritation and promote wound healing.

Manuka oil is recommended for muscle aches, arthritic discomfort and pain. It benefits all disorders of the respiratory system including cough, and cold and flu mediation. It is especially suited to sensitive individuals who present with digestive disorders or sensitive skin conditions. It is said to balance the sympathetic and parasympathetic nervous systems. There are over 30 studies in PubMed on this botanical species, much focused on the immune-stimulant and antibacterial properties of the honey, including its efficacy against *Staphylococcus aureus*. The use of the essential oil has also been studied in vitro against herpes simplex I and II with effective results.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand & Body Wash	Wound Care	Surface Disinfectant	Insect Repellant
Cleanser	Message	Diaper Rash	Detergent	Aromatherapy
Shaving & Post Wax	Hair Care	Decongestant		
	Oral Care	Muscle Pain		
	Deodorant	Foot Spray		
		Cold Sore		

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

There are several chemotypes; the East Coast variety has low levels of monoterpenes and high levels of sequiterpenes and triketones. Only the East Cape chemotype has demonstrated antimicrobial efficacy. This oil is decidedly anti-inflammatory with a broad range of compounds, none of which individually dominate. Leptospermone and calamenene are the highest, comprising about 15% each; all other compounds are approximately under 5%.

FDA Disclaimer

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References

Battaglia, Salvatore. The Complete Guide to Aromatherapy; International Center for Holistic Aromatherapy, 2003; Brisbane, Australia.

Costa R, et al. Nat Prod Commun. 2010 Nov;5(11):1803-8. Volatiles from steam-distilled leaves of some plant species from Madagascar and New Zealand and evaluation of their biological activity.

For references on specific topics please contact us.

Essential Oils - Sandalwood

Product Name:	100% Pure Australian Sandalwood Oil
Botanical name:	*Santalum spicatum (syn. Fusanus spicatus)*
INCI:	Santalum Spicatum Wood Oil (syn. Fusanus Spicatus Wood Oil)
HS Code:	3301.29
UN Code:	Non-Hazardous
CAS No:	92875-02-0
Part of Plant Used:	Wood
Appearance:	Pale yellow to golden brown
Aroma:	Sweet, soft woody
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional, USDA Organic NPA (Home and Personal)

Therapeutic Properties

Australian Sandalwood now accounts for over 85% of the world's sandalwood supplies. These reserves are carefully and sustainably managed by the Western Australian government through annual harvest quotas and extensive replanting efforts.

The essential oil comes from the heartwood of the tree. The Australian Sandalwood Tree must be more than 20 years old to develop the heartwood necessary for good quality oil. This contrasts to the Indian Mysore Sandalwood which requires at least 30 years to achieve the same quality.

Research by Sydney University has shown that WA Sandalwood has anti-inflammatory properties in-line with the traditionally used East Indian Sandalwood. Anti-inflammatory properties have been attributed to alpha-bisabolol and the WA Sandalwood contains higher amounts of alpha-bisabolol (5-10%) than East Indian Sandalwood Oil. *Santalum spicatum* also contains beta-santalene (generally less than 1%), another component that has demonstrated anti-inflammatory properties. It is especially suited to the treatment of hot, red skin conditions such as eczema, psoriasis, rash or other inflammation. It has a long historic association with the treatment of urinary tract infections. It is astringent and helps resolve respiratory congestion, and is especially useful when soothing, demulcent effects are required, such as in chronic bronchitis involving dry cough. It is also a lymphatic decongestant, specific for stasis such as varicose veins and swollen.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Dry and Inflamed Skin	Acne Treatment	Dermatitis		Insect Repellent
	Shave Products	Eczema		Stress Reduction
	Deodorant	Psoriasis		Air Diffusion
	Bath Salts	Cold Sores		Perfumery
		Respiratory		

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

"If a comparison of the chemical constituents of West Australian (WA) Sandalwood Oil (S. spicatum) with East Indian Sandalwood (S. album) is made, both are extracted from the heartwood and rootball of the species and it can be seen that they are similar chemically, in that they both contain alpha and beta santalol. WA Sandalwood Oil contains higher levels of farnesol and alpha-bisabolol than East Indian oil. Both these compounds have been demonstrated to have antimicrobial and anti-inflammatory properties." (Webb).

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References

Battaglia, Salvatore. The Complete Guide to Aromatherapy; International Center for Holistic Aromatherapy, 2003; Brisbane, Australia.

Schnaubelt, Kurt. Medical Aromatherapy; Frog Ltd, 1999. Berkeley, CA.

Webb, Mark; Bush Sense; Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Lavender Tea Tree (Rosalina)

Product Name:	100% Pure Australian Lavender Tea Tree (Rosalina) Oil
Botanical name:	*Melaleuca ericifolia*
INCI:	Melaleuca Ericifolia Leaf Oil
HS Code:	3301.29
UN Code:	Non-Hazardous
CAS No:	85085-48-9
Part of Plant Used:	Leaves
Appearance:	Colorless to pale yellow mobile liquid
Aroma:	Soft floral, slightly camphoraceous, rosy aroma
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Research indicates its effectiveness against transient skin bacteria, making the oil a wonderful addition in personal skin care products (The Utilization of Australian Native Oils for the Control of Transient Bacteria in Skin Care Products). The “rosy” aroma also lends itself to being a replacement for other more expensive “rose” scented oils. It blends well with other oils, being compatible for formulation of various types. From the standpoint of Traditional Chinese Medicine it is considered a “yin” oil, calming many conditions of heat (excess “yang”) such as inflammation, swelling, tenderness, as well as mental overstimulation that may lead to insomnia or anxiety.

The main constituent, linalool, is a good antiseptic, spasmolytic and anticonvulsant. Researchers at the ethnopharmacology laboratory at the University in Porto Alegre, Brazil, have shown that linalool has effective sedative effects and is rapidly absorbed through the skin and nasal mucosa. It is an effective antibacterial for upper respiratory tract congestion and infections, particularly in small children. The oil is a gentle expectorant with good anti-infectious properties. Topical use on acne, insect bites, boils, athlete’s foot and herpes; it is antimicrobial and antifungal with a wide range of applications.

Linalool delivers relaxation properties great for calming and relaxing, and ideal for sleep and stress disorders. This tertiary monoterpenol offers sedative properties (even through inhalation) that may work through the central nervous system to modify the response to excitatory neurotransmitters associated with convulsions. The antispasmodic effects work through the modulation of a cell signaling molecule which affects the ability of smooth muscle to contract (Bowles).

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Dermatitis/ Eczema	Hand & Body Wash	Wound Care		Perfume
Shaving & Post Wax	Massage	Diaper Rash		Aromatherapy
	Hair Care	Decongestant		
	Oral Care	Muscle Pain		
	Femanine Care	Foot Spray		
	Lip Balm			
	Deodorant			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

Major constituents include linalool, alpha-pinene, para-cymene, limonene, 1,8 cineole, alpha-terpinene, terpinolene, terpinen-4-ol, alpha-terpineol, aromadendrene, and virdiflorol. Linalool content ranges between 35%-55%. These chemical constituents are similar to that of Melaleuca alternifolia except that the major component is linalool and not terpinen-4-ol.

FDA Disclaimer

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References

Webb, Mark. Bush Sense; Griffin Press 2000; Adelaide, Australia.

Bowles, Joy. The Chemistry of Aromatherapeutic Oils; Allen & Unwin 2003; NSW Australia.

For references on specific topics please contact us.

Essential Oils - Lemon Scented Tea Tree (Citratum)

Product Name:	100% Pure Australian Lemon Scented Tea Tree
Botanical name:	*Leptospermum petersonii*
INCI:	Leptospermum Petersonii Oil
HS Code:	3301.29
UN Code:	Non-Hazardous
CAS No:	85085-43-4
Part of Plant Used:	Leaves and twigs
Appearance:	Clear colorless to yellow mobile liquid
Aroma:	Pleasant, vibrant, uplifting lemon aroma
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional, EcoCert, COSMOS

Therapeutic Properties

Anti-infectious, anti-viral, antiseptic, sedative, expectorant, anti-inflammatory, digestive aid; reduces excessive sebum production and acne.

Lemon Scented Tea Tree Oil (*Leptospermum petersonii*) has also been found to be an excellent anti-fungal agent. Park *et al.* published their findings on the beneficial properties of *Leptospermum petersonii* against five common dermatophytes. The authors reported that a *Leptospermum petersonii* concentration of 0.2mg/ml (0.02%) completely inhibited growth in three of five common organisms, with growth of the remaining two being reduced by up to 92% versus control. Further work into its anti-fungal benefits was conducted by Hood *et al.* The authors evaluated the use of *Leptospermum petersonii* as an anti-fungal fumigant. Both in-vitro and in-vivo results demonstrated a significant fungal burden reduction greater that that found with a course of conventional antifungal drugs.

Perhaps the most compelling use of Lemon Scented Tea Tree Oil is its ability to mask the odor of Tea Tree Oil. At a mere 1:7 concentration, the typical Tea Tree Oil smell is virtually indistinguishable.

Several research studies show this oil to be effective against specific strains of yeast and fungus as well as being a reasonable insect repellent. Research conducted by Penfold and Grant as early as 1925 demonstrated the ability of Lemon Scented Tea Tree Oil to act as a powerful disinfectant (Webb).

Their research demonstrated that it was a more powerful disinfectant than the more well-known Tea Tree Oil.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand & Body Wash	Wound Care	Surface Disinfectant	Perfume
Cleanser	Massage	Decongestant	Cleaner	Insect Repellent
	Hair Care		Room Freshener	Preservative
			Detergent	Aromatherapy

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Major Chemical Constituents

Major constituents include neral (20-35%), geranial (20-30%) and citronellal (10-35%).

FDA Disclaimer

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References

Kim E, Park IK. "Fumigant antifungal activity of Myrtaceae essential oils and constituents from Leptospermum petersonii against three Aspergillus species." Molecules. 2012 Sep 3;17(9):10459-69.

Hood JR, et al. "Antifungal activity of Leptospermum petersonii oil volatiles against Aspergillus spp. in vitro and in vivo." J Antimicrob Chemother. 2010 Feb;65(2):285-8.

Maguranyi SK, et al. Are commercially available essential oils from Australian native plants repellent to mosquitoes? J Am Mosq Control Assoc. 2009 Sep;25(3):292-300.

Park MJ, et al. Antifungal activities of the essential oils in Syzygium aromaticum (L.) Merr. Et Perry and Leptospermum petersonii Bailey and their constituents against various dermatophytes. J Microbiol. 2007 Oct;45(5):460-5.

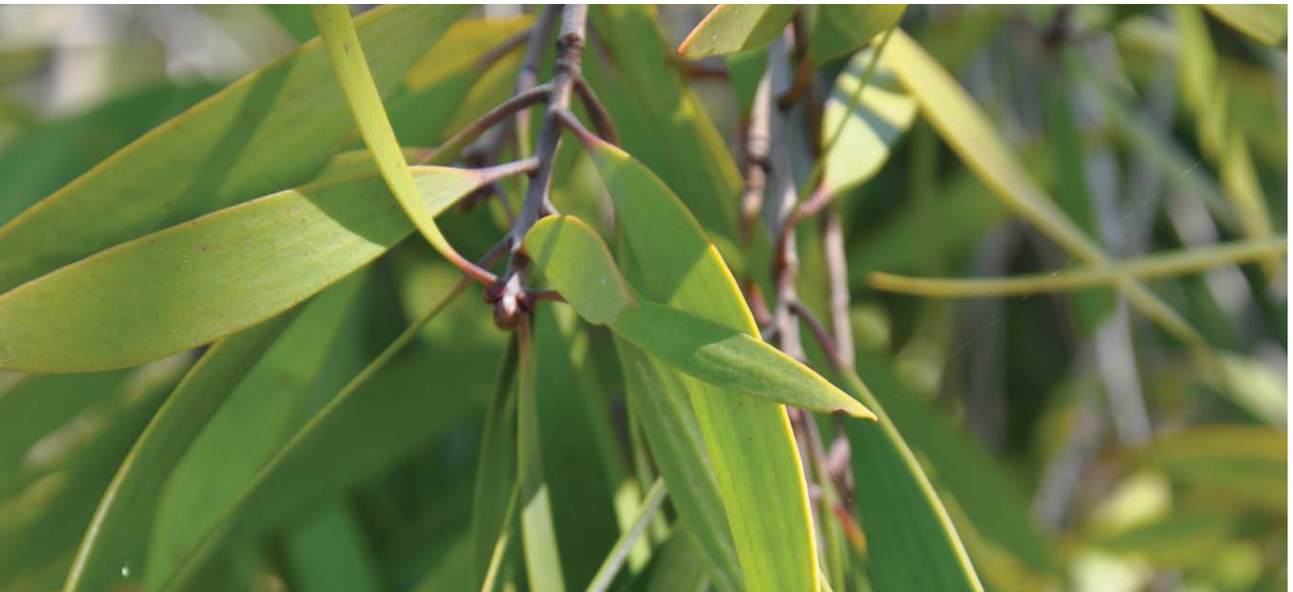
Therapeutic Goods Administration (Australia) – Complementary Medicines Evaluation Committee. Evaluation of New Substances – Leptospermum petersonii (up to 5%) oil. Meeting 45 Ratified Minutes. 23 April 2004.

Webb, Mark. Bush Sense. Griffin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Essential Oils - Niaouli

Product Name:	100% Pure Australian Niaouli Oil
Botanical name:	*Melaleuca quinquenervia*
INCI:	Melaleuca Quinquenervia Leaf Oil
HS Code:	3301.29
UN Code:	1169
CAS No:	None issued
Part of Plant Used:	Leaves and terminal branches
Appearance:	Clear, colorless to pale yellow liquid
Aroma:	Lavender and lilac notes
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional



Therapeutic Properties

The essential oil from Australian Niaouli (*Melaleuca quinquenervia*) is quite different from that of the New Caledonian, Indonesian, or other regions where this tree has been commercialized. The Australian chemotype produces an aroma with a rich, minty, eucalyptus-like freshness.

A member of the Melaleuca (tea tree) family, this tree is commonly known as a broad-leafed paperbark. The leaves are much wider than that of the better known Tea Tree (*Melaleuca alternifolia*), while the peeling paper-like bark was traditionally used by local Aboriginal communities for many purposes, including cooking.

Therapeutically, this plant offers anti-microbial properties, although not as potent as *Melaleuca alternifolia*. However, individuals may find the less medicinal aroma preferable to the more common Tea Tree.

Interestingly, this species is considered a noxious weed in the Florida Everglades. It has adapted exceedingly well in that climate, developing seed germination rates 3-4 times greater than what occurs in Australia. Extensive research is underway to limit the spread of this unwelcome arrival in Florida. No such status exists for this plant in Australia, where natural predators limit the growth and new germination rates.

Amer *et al.* reported on the potential use of Niaouli as an effective natural insect repellent. The authors investigated 41 plant extracts and oil combinations. They identified the oil of *Melaleuca quinquenervia* as one of the five most effective from the panel. They cited efficacy of up to 8 hours against the mosquito species *Aedes, Anopheles,* and *Culex*. However they did note that a special formulation is required to fix the oil to the skin effectively.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
	Shampoo		Surface Disinfectant	Aromatherapy
	Scalp		Laundry	Pet Bed
				Insect Repellent

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Major Chemical Constituents

Major constituents include trans-nerolidol (30-60%), cis-nerolidol (5-15%), 1-8 cineole (trace-3%), terpineol, pinene, limonene, and myrcene.

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

Amer A, Mehlhorn H; Repellency effect of forty-one essential oils against Aedes, Anopheles, and Culex mosquitoes; Parasitol Res; 478-90; 2006.

Cock IE, Winnett V, Sirdaarta J, Matthews B; The potential of selected Australian medicinal plants with anti-Proteus activity for the treatment and prevention of rheumatoid arthritis; Pharmacogn Mag; S190-208; May, 2015.

For references on specific topics please contact us.

Essential Oils - Tea Tree

Product Name:	100% Pure Australian Tea Tree Oil
Botanical name:	*Melaleuca alternifolia*
INCI:	Melaleuca Alternifolia (Tea Tree) Leaf Oil
HS Code:	3301.29.60
UN Code:	2319
CAS No:	85085-48-9
Part of Plant Used:	Foliage and terminal branchlets
Appearance:	Clear, colorless to yellow mobile liquid
Aroma:	Warm, spicy, earthy, characteristic
Extraction Method:	Steam distilled (water)
Farming Method/ Certifications:	Conventional, USDA Organic, EcoCert, COSMOS, NPA (Home and Personal)

Therapeutic Properties

Many research studies have shown Tea Tree Oil's efficacy against a wide range of bacteria and fungi.

Volumes of research exist making it very difficult to summarize all the properties of this antimicrobial essential oil; PubMed lists over 1,400 published papers. Of particular note is Tea Tree Oil's effectiveness in the treatment of acne. In 1990 researchers compared *Melaleuca alternifolia* to conventional acne treatments such as benzoyl peroxide. They concluded that although the *Melaleuca alternifolia* was initially slower to act, it had fewer side effects when compared to the benzoyl peroxide lotion.

It is also a notable antiviral and has been confirmed effective against a wide range of yeast and bacteria.

It is considered nontoxic and non-irritant, sensitizing to less than 0.2% of the general population.

Research has also shown Tea Tree Oil's effectiveness against Methicillin-resistant *Staphylococcus aureus* (MRSA). This is a very exciting potential for Tea Tree Oil given the issues of MRSA contagion in public buildings such as hospitals and prisons.

Major Chemical Constituents

ISO4730 (2016) stipulates the 15 most common components and relative proportions in pure Tea Tree Oil.

Major constituents include terpenin-4-ol, alpha-pinene, sabinene, alpha-terpinen, limonene, para-cymene, 1,8-cineole, gamma-terpineol, terpinolene, alpha-terpineol, aromadendrene, delta-cadinene, globulol, and viridiflorol.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Acne	Hand & Body Wash	Wound Care	Surface Disinfectant	Aromatherapy
Cleanser	Massage	Diaper Rash	Cleaner	Preservative
Shaving & Post Wax	Hair Care	Foot Spray	Detergent	
	Oral Care	Cold Sore		
	Femanine Care			
	Lip Balm			
	Deodorant			

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FDA Disclaimer

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References

Bowles Joy. The Chemistry of Aromatherapeutic Oils; Allen & Unwin 2003; NSW Australia.

For references on specific topics please contact us.

Carrier Oils - Macadamia

Product Name:	100% Pure Australian Macadamia Oil – Refined Cosmetic Grade
Botanical name:	*Macadamia integrifolia*
INCI:	Macadamia Integrifolia Seed Oil
HS Code:	1515.90
UN Code:	Non-Hazardous
CAS No:	159518-86-2
Part of Plant Used:	Seed kernel
Appearance:	Clear/bright
Aroma:	Neutral to slight nutty essence
Extraction Method:	Mechanical press
Farming Method/ Certifications:	Conventional

Therapeutic Properties

Macadamia oil is ideal for cosmetics due to its silky texture. It is a natural and sustainable replacement for mink and whale oil.

Traditional uses of the Aborigines of New South Wales and Queensland where macadamia is endemic include the treatment of sunburn and scarring.

The standout component of Macadamia Oil is its relatively high concentration of Palmitoleic Acid.

A natural component of young skin, the presence of this fatty acid declines with age. Formulating with Macadamia Oil (refined Cosmetic Grade) may help to restore vital skin nutrients and help the skin feel and look younger.

The highest concentration fatty acid, Oleic acid is an anti-inflammatory and makes a good addition to moisturizing formulations in all body care products.

Macadamia oil's rich feel and viscosity, and high oxidative stability make it especially suitable for heavy creams and sun care preparations.

Major Chemical Constituents

Major constituents include Oleic Acid (55-67%) and Palmitoleic Acid (16-22%). The minor components include Lauric Acid, Myristic Acid, Palmitic Acid, Stearic Acid, Linoleic Acid, Linolenic Acid, Arachidic Acid, Eicoseenoic Acid and Behenic Acid.

FDA Disclaimer

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Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Moisturiser	Hand & Body Wash	Wound Care		Perfume
Dermatitis Eczema	Massage	Diaper Rash		Aromatherapy
Shaving & Post Wax	Hair Care	Muscle Pain		
	Femanine Care			
	Lip Balm			
	Deodorant			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

References

Maguire LS, O'Sullivan SM, Galvin K, O'Connor TP, O'Brien NM. Fatty acid profile, tocopherol, squalene and phytosterol content of walnuts, almonds, peanuts, hazelnuts and the macadamia nut. Int J Food Sci Nutr. 2004 May;55(3):171-8.

For references on specific topics please contact us.

Bio-Actives - Sandalwood Seed Oil

Product Name:	100% Pure Australian Sandalwood Seed Oil
Botanical name:	*Santalum spicatum*
INCI:	Santalum Spicatum (Seed) Oil
HS Code:	1515.90
UN Code:	Non-Hazardous
CAS No:	1542150-96-8
Part of Plant Used:	Seed kernel
Appearance:	Clear, yellow to golden-yellow, viscous liquid
Aroma:	Very mild nutty aroma, reminiscent of Sandalwood essential oil
Extraction Method:	Super critical fluid extraction (CO_2)
Farming Method/ Certifications:	Conventional, EcoCert, COSMOS

Therapeutic Properties

Sandalwood Seed Oil is the fatty oil obtained by a novel Green Chemistry™ supercritical (CO_2) fluid extraction process. Sandalwood seed oil is a rich source of a natural and highly stable, acetylenic fatty acid - Ximenynic Acid – which offers well documented pharmacologic benefits:

- Aging process
- Varicose veins and cellulitis
- Hair loss
- Fat deposition
- Skin oiliness
- Inflammation

Sandalwood Seed Oil is non-toxic and non-irritating (dermal and ocular). The oil is produced in a sustainable manner, in cooperation with traditional Aboriginal Communities.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Night Cream	Body Moisturiser	Varicose Vein Cream		
Facial Moisturiser	Cellulite Cream			
Facial Scrub	Shampoo			
	Intense Hair Treatment			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

Major constituents include Oleic Acid (48-56%) and Ximenynic Acid (28-36.5%). The minor components include palmitic acid, palmitoleic acid, stearic acid, linoleic acid, α-linoleic acid and stearolic acid.

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

Bombardelli, Ezio, Aldo Cristoni, and Paolo Morazzoni. “Combinations of vasoactive substances with fatty acids to prevent hair loss.” U.S. Patent No. 5,665,335. 9 Sep. 1997.

Bombardelli, Ezio, and Sergio B. Curri. “Polyunsaturated acids having vasokinetic action and pharmaceutical and cosmetic formulations containing them.” U.S. Patent No. 5,104,655. 14Apr. 1992.

Bombardelli, Ezio. “Combinations of vasoactive agents and their use in the treatment of sexual dysfunctions.” U.S. Patent No. 8,092,844. 10 Jan. 2012.

Bombardelli E, Guglielmini G, Morazzoni P, Curri SB, Polinelli W. Microvasculokinetic activity of ximenynic acid ethyl ester. Fitoterapia [Pharmacology of Ximenynic acid] 1994; 65(3): 195.

Croft KD, Beilin LJ, Ford GL. Differential inhibition of thromboxane B2 and leukotriene 84 biosynthesis by two naturally occurring acetylenic fatty acids. Biochimica et Biophysica Acta(BBA) - Lipids and Lipid Metabolism. 1987; 921(3):621-624.

Di Pierro, Francesco. “Pharmaceutical and/or cosmetic compositions for the treatment of localised adiposities and cellulite.” U.S. Patent No. 7,476,392. 13 Jan. 2009.

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For references on specific topics please contact us.

Hydrosols - Tea Tree

Product Name:	100% Pure Australian Tea Tree Hydrosol
Botanical name:	*Hydrosol of Melaleuca alternifolia*
INCI:	Melaleuca Alternifolia (Tea Tree) Leaf Water
HS Code:	3303.00
UN Code:	Non-Hazardous
CAS No:	None issued
Part of Plant Used:	Foliage and terminal branchlets
Appearance:	Clear mobile liquid
Aroma:	Slightly medicinal
Extraction Method:	Steam distilled
Farming Method/ Certifications:	Conventional, USDA Organic

Therapeutic Properties

Like its ubiquitous essential oil counterpart, Tea Tree Hydrosol possesses wide spectrum anti-microbial, anti-bacterial, and anti-fungal properties. It has been validated in independent research lab testing as an effective preservative for oral personal care products, achieving a bacterial colony count reduction of ≥103 at 14 days post-challenge, and ≥101 reduction for yeast and mold.

Microbiology culture testing was also performed using *Staphylococcus aureus, Pseudomonas spp., E. coli,* and *Salmonella spp.,* as well as bile tolerant gram negative bacteria. Results of these studies indicated no detectable cell counts at 5 days incubation (20-25°C).

Tea Tree Hydrosol has been approved by the Australian Therapeutic Goods Administration (TGA, the Australian medical regulatory authority) to assist the healing of pimples, minor wounds and skin irritations. Furthermore, it is approved to help clean the skin and reduce the potential for minor skin infections.

Unfortunately, the use of Tea Tree Oil for pets remains controversial due to several misunderstood published anecdotal reports. However, the hydrosol of Tea Tree is being extensively and successfully studied for pets and will likely lead to a wide range of products.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Facial Toner and Mist	Bath Balm	Skin Cuts and Abrasions	Surface Disinfectant	Water Replacement in Personal Care Formulations
	Post Shaving	Flushing Solution for Wounds and Abscesses		
	Douche Solution	Nail Fungal Infections		

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

Major constituents include Tea Tree Oil volatiles (905.94ppm), Terpinen-4-ol (725.08ppm), 1,8-cineole (7.19ppm) and α-terpineol (128.34ppm).

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

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Webb, Mark. Bush Sense; Griffiin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Hydrosols - Sandalwood

Product Name:	100% Pure Australian Sandalwood Hydrosol
Botanical name:	*Hydrosol of Santalum spicatum*
INCI:	None issued
HS Code:	3303.00
UN Code:	Non-Hazardous
CAS No:	None issued
Part of Plant Used:	Wood
Appearance:	Near colorless liquid
Aroma:	Sweet, soft and woody
Extraction Method:	Steam distilled
Farming Method/ Certifications:	Conventional

Therapeutic Properties

The hydrosol from the steam distillation of Sandalwood is a very stable (unpreserved shelf life >18 months) solution which may be used for its mild astringent, anti-bacterial, and anti-inflammatory capabilities.

The sandalwood hydrosol has an aroma quite similar, yet softer, to the essential oil. This characteristic odor, used so extensively in perfumery as a base note, may be further employed in aqueous-based formulations for fragrance and functional advantages.

As Down Under Enterprises increases the availability of this hydrosol, more uses and formulations in Personal Care and Home Care products will result.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Facial Mask	Bath Fragrance		Linen Spray	Water Replacement in Formulations
Facial Toner and Mist	Deoderiser			
	Cooling Agent			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

Major constituents include include cis-α-santalol, epi-α-santalol, epi-β-santalol, cis-β-santalol, cis-nuciferol, cis-β-curcumene-12-ol, cis-lanceol, and trans, trans-farnesol.

FDA Disclaimer

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References

Bowles, Joy. The Chemistry of Aromatherapeutic Oils; Allen & Unwin 2003; NSW Australia.

Catty, S; Hydrosols: The Next Aromatherapy. Healing Arts Press. Rochester, Vermont. 2001.

Webb, Mark; Bush Sense; Griffin Press 2000; Adelaide, Australia.

Wilkinson, J.M., Cavanagh, H.M.A., "Antibacterial activity of essential oils from Australian native plants", Phytotherapy Research, Volume 19, Issue 7, pp.643 - 646. July 2005.

For references on specific topics please contact us.

Hydrosols - Lavender

Product Name:	100% Pure Australian Lavender Hydrosol
Botanical name:	*Lavandula angustifolia*
INCI:	None issued
HS Code:	3303.00
UN Code:	Non-Hazardous
CAS No:	None issued
Part of Plant Used:	Fresh flowering tops
Appearance:	Clear
Aroma:	Sweet, floral
Extraction Method:	Steam distilled
Farming Method/ Certifications:	Conventional

Therapeutic Properties

The wonderfully refreshing fragrance of lavender hydrosol may be applied in a wide range of personal care, medicinal, and household applications. Lavender Hydrosol offers calming and anti-inflammatory properties. Ideally suited to formulations for the elderly or small children due to its mild, non-toxic character. Use lavender hydrosol as an excellent water (aqua) replacement in formulations.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Facial Mask	Bath Fragrance	Calm Sunburn	Linen Spray	Water Replacement in Formulations
Cleanser	Baby Products	Heat Rash	Air Freshener	
Moisturizer				
Facial Toner and Mist				
Make Up Remover				

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References

Catty, S; Hydrosols: The Next Aromatherapy. Healing Arts Press. Rochester, Vermont. 2001.

Webb, Mark. Bush Sense; Griffiin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Hydrosols - Fragonia™

Product Name:	100% Pure Australian Fragonia™ Hydrosol
Botanical name:	*Hydrosol of Agonis fragrans*
INCI:	None issued
HS Code:	3303.00
UN Code:	Non-Hazardous
CAS No:	None issued
Part of Plant Used:	Terminal branches
Appearance:	Near colorless liquid
Aroma:	Fresh cineolic character
Extraction Method:	Steam distilled
Farming Method/ Certifications:	Conventional

Therapeutic Properties

The hydrosol from the steam distillation of *Agonis fragrans* (Fragonia™) exhibits the same olfactory character as the essential oil, yet in a milder format. As a water-based solution, Fragonia hydrosol offers excellent calming and relaxing properties.

More scientific work on this new and exciting essential oil and hydrosol are underway.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Facial Mask	Bath Fragrance		Linen Spray	Water Replacement in Formulations
Facial Toner and Mist	Deodorizer			
	Cooling Agent			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

FDA Disclaimer

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References

Catty, S; Hydrosols: The Next Aromatherapy. Healing Arts Press. Rochester, Vermont. 2001.

Webb, Mark. Bush Sense; Griffiin Press 2000; Adelaide, Australia.

For references on specific topics please contact us.

Other - Tea Tree Leaf (Dried)

Product Name:	100% Pure Australian Tea Tree Milled Leaf (Dried)
Botanical name:	*Melaleuca alternifolia*
INCI:	None Issued
HS Code:	1211.90.93
UN Code:	Non-Hazardous
CAS No:	None Issued
Part of Plant Used:	Leaves
Appearance:	Light green to khaki
Aroma:	Warm, spicy, earthy
Extraction Method:	Not applicable
Farming Method/ Certifications:	Conventional, EcoCert, COSMOS

Therapeutic Properties

The leaves from the *Melaleuca alternifolia* plant are selected at their prime oil content state, carefully air dried, and ground to either a coarse or a fine grade to be used in a range of applications similar to the pure Tea Tree essential oil.

Possessing the anti-bacterial, anti-microbial, anti-viral, anti-fungal properties of the essential oil, the leaf product also retains the tea tree's natural water-based properties. Dried tea tree leaves offer the broadest essence of the natural plant in a readily assessable format for personal care applications.

Microbiological Evaluation

Each batch of Tea Tree Leaf (Dried) undergoes extensive microbiological evaluation conforming to BP1988 Standards (App XVI B2 and Opt A + B).

Grading

Coarse leaf passes a 3000 µm screen (100%).

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Facial Mask	Hand Cleanser			
Facial Scrub	Body Scrub			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

FDA Disclaimer

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Other - Kakadu Plum Powder

Product Name:	100% Pure Australian Kakadu Plum Powder
Botanical name:	*Terminalia ferdinandiana*
INCI:	None issued
HS Code:	
UN Code:	Non-Hazardous
CAS No:	None issued
Part of Plant Used:	Fruit flesh and skin without seed
Appearance:	Dry pale green-yellow powder
Aroma:	Slight plant odor
Extraction Method:	Mechanically pressed
Farming Method/ Certifications:	Conventional/wildcrafted

Therapeutic Properties

A part of the traditional diet of Aboriginal communities in the key growing region of Australia's north coast, Kakadu plum is an exciting new ingredient for the global personal care and supplement industry. Kakadu Plum Powder (water based) has been identified as containing one of the highest sources of Vitamin C (Ascorbic Acid) on the planet – gram-to-gram over 50 times greater than an orange!

The dried Kakadu Plum powder contains ascorbic acid, fiber (>47.5%), gallic acid, and ellagic acid. Gallic acid is known for its anti-fungal and anti-viral properties, while ellagic acid's anti-oxidative properties compliment the ascorbic acid functionality. The Oxygen Radical Absorbance Capacity (ORAC) value of Kakadu Plum is 600% greater than goji berries.

Use Kakadu Plum powder in new personal care products or in current formulations replacing other anti-oxidative ingredients such as cranberry, goji berry, blueberry, green tea, or even acerola.

Major Chemical Constituents

Ascorbic acid (vitamin C) >50%; dietary fiber.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Facial Mask	Hand Cleanser			
Facial Scrub	Body Scrub			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

FDA Disclaimer

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Concrete - Mountain Pepper Oil

Product Name:	100% Pure Australian Mountain Pepper Oil
Botanical name:	*Tasmania lanceolate*
INCI:	None issued
HS Code:	3301.29
UN Code:	Non-Hazardous
CAS No:	None issued
Part of Plant Used:	Leaves
Appearance:	Dark citron green viscous liquid
Aroma:	Reminiscent of the Australian bush, dry paper bark and herbs
Extraction Method:	Hexane extraction followed by CO_2 refining
Farming Method/ Certifications:	Conventional, Wildcrafted

Therapeutic Properties

Mountain Pepper concrete is produced from an abundant wild resource where the bush grows copiously in moist, sheltered environments from sea level to sub alpine areas within Tasmania, Australia's southern island state.

The leaves are harvested using sustainable methods before drying, milling, extraction and refining.

Mountain Pepper Concrete has a distinctive and exotic aroma, possessing fresh and spicy top notes overlying a peppery background. This oil presents as a dark citron green, viscous material. The concrete is partially soluble in ethanol.

Produced from the leaves of the native Tasmanian Mountain Pepper bush (*Tasmania lanceolata*) and traditionally used as a spice, Tasmanian Native Pepper has been a favourite within the local market for decades. Lipophilic extracts of Tasmanian Native Pepper are very high in the unique pungent compound polygodial.

Very few plant species in the world contain polygodial, which research has shown is responsible for many interesting properties with potential applications in food, flavor, oral care, cosmetics, fragrance, therapeutic goods and cleaning products. Of note, while this is highly pungent (180,000 Scoville units), it is considered as a (dermal) non-irritant (RIPT) in a 2% concentration.

Cock, *et al.* (2105) reported on the study of native Australian flora to inhibit the microbial onset of rheumatoid arthritis (RA) by *Proteus mirabilis.* The authors noted Mountain Pepper Oil (*Tasmania lanceolate*) elicited the most favourable inhibition of *Proteus mirabilis*, with MIC significantly less than 1000ug/ml. The authors also noted the extract was non-toxic using the *Artemia napulii* bio-assay. The authors concluded that the bioactivity of *Tasmania lanceolate* provides good potential as a blocker of microbial-induced rheumatoid arthritis.

Potential Product Applications

Skincare	Personal Care	Medicinal	Household	Other
Antioxidant	Toothpaste			Culinary
	Mouthwash			

To receive a copy of our Applications Guide for Pure Australian Essential Oils and Carrier Oils, please contact us.

Major Chemical Constituents

Major components include polygodial (12-16%), guaiol (4-6%), calamenene, and linalool.

FDA Disclaimer

These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

References

Bowles, Joy. The Chemistry of Aromatherapeutic Oils; Allen & Unwin 2003; NSW Australia.

Cock IE, Winnett V, Sirdaarta J, Matthews B; The potential of selected Australian medicinal plants with anti-Proteus activity for the treatment and prevention of rheumatoid arthritis; Pharmacogn Mag; S190-208; May, 2015.

Webb, Mark; Bush Sense; Griffin Press 2000; Adelaide, Australia.

Wilkinson, J.M., Cavanagh, H.M.A., "Antibacterial activity of essential oils from Australian native plants", Phytotherapy Research, Volume 19, Issue 7, pp.643 - 646. July 2005.

For references on specific topics please contact us.

COMMON NAME	BOTANICAL NAME	FARMING METHOD				ORDER QUANTITIES AVAILABLE (BY SKU)					
		Conventional	USDA Organic	COSMOS	Wildcrafted	1 kg (2.2lb)	5 kg (11lb)	10 kg (22lb)	20 kg (44lb)	185 kg (408lb)	Bulk (ton+)
ESSENTIAL OILS											
Anise Myrtle	*Syzygium anisatum*	✓				SA1	SA5	SA10	SA20	SA180	
Balm Mint Bush	*Prostanthera melissifolia*	✓				PM1	PM5	PM10	PM20	PM180	
Buddha Wood	*Eremophila mitchellii*	✓			✓	EM1	EM5	EM10	EM20	EM180	
Cypress, Blue	*Callitris intratropica*	✓		✓		CI1	CI5	CI10	CI20	CI185	
Cypress, White (Leaf)	*Callitris columellaris*	✓			✓	CC1	CC5	CC10	CC20	CC185	
Cypress, White (Wood)	*Callitris columellaris*	✓			✓	CCW1	CCW5	CCW10	CCW20	CCW185	
Eucalyptus Australiana	*Eucalyptus radiata*	✓					EuR5	EuR10	EuR20	EuR185	
Eucalyptus Australiana - USDA Organic	*Eucalyptus radiata*		✓				EuR(USDAOrg)5	EuR(USDAOrg)10	EuR(USDAOrg)20	EuR(USDAOrg)180	
Eucalyptus, Blue Mallee	*Eucalyptus polybractea*	✓					EuP5	EuP10	EuP20	EuP180	
Eucalyptus, Blue Mallee - USDA Organic	*Eucalyptus polybractea*		✓				EuP(USDAOrg)5	EuP(USDAOrg)10	EuP(USDAOrg)20	EuP(USDAOrg)180	
Eucalyptus, Lemon Scented	*Eucalyptus citriodora*	✓					EuC5	EuC10	EuC20	EuC180	
Eucalyptus, Lemon Scented Iron Bark	*Eucalyptus staigeriana*	✓				EuSt1	EuSt5	EuSt10	EuSt20	EuSt180	
Eucalyptus, White Iron Bark (Gully Gum)	*Eucalyptus smithii*	✓				EuSm1	EuSm5	EuSm10	EuSm20	EuSm180	
Eucalyptus, Peppermint Gum	*Eucalyptus dives*	✓				EuD1	EuD5	EuD10	EuD20	EuD180	
Eucalyptus, Strawberry Gum	*Eucalyptus olida*	✓				EuO1	EuO5	EuO10	EuO20	EuO180	
Fragonia™	*Agonis fragrans*	✓				AF1	AF5	AF10	AF20	AF185	
Honey Myrtle	*Melaleuca teretifolia*	✓				MT1	MT5	MT10	MT20	MT185	
Kunzea	*Kunzea ambigua*	✓				KA1	KA5	KA10	KA20	KA180	
Lavender, Australian	*Lavandula angustifolia*	✓				LA1	LA5	LA10	LA20	LA180	
Lemon Myrtle	*Backhousia citriodora*	✓		✓		BC1	BC5	BC10	BC20	BC180	
Manuka	*Leptospermum scoparium*				✓	LS1	LS5	LS10	LS20	LS180	
Niaouli (LN chemotype)	*Melaleuca quinquinervia*	✓				MQC1	MQC5	MQC10	MQC20	MQC180	
Nerolina	*Melaleuca quinquinervia*	✓				MQ1	MQ5	MQ10	MQ20	MQ180	
Sandalwood, Australian - Regular Grade	*Santalum spicatum*				✓	SS1	SS5	SS10	SS20	SS180	
Sandalwood, Australian - USDA Organic	*Santalum spicatum*		✓			SS(USDAOrg)1	SS(USDAOrg)5	SS(USDAOrg)10	SS(USDAOrg)20	SS(USDAOrg)180	
Sandalwood, Australian - Premium Grade	*Santalum spicatum*				✓	SSPG1	SSPG5	SSPG10	SSPG20	SSPG180	
Lavender Tea Tree (Rosalina)	*Melaleuca ericifolia*	✓				ME1	ME5	ME10	ME20	ME185	
Lemon Scented Tea Tree (Citratum)	*Leptospermum petersonii*	✓		✓		LP1	LP5	LP10	LP20	LP185	
Tea Tree	*Melaleuca alternifolia*	✓		✓				MA10	MA20	MA185	MA900
Tea Tree - USDA Organic	*Melaleuca alternifolia*		✓					MA(USDAOrg)10	MA(USDAOrg)20	MA(USDAOrg)185	MA(USDAOrg)900
CARRIER OILS											
Macadamia Oil	*Macadamia integrifolia*	✓								MIC180	MIC900
HYDROSOLS (FLOWER WATERS)											
Tea Tree	*Melaleuca alternifolia*	✓		✓				MAHYD10	MAHYD20	MAHYD185	MAHYD1000
Tea Tree - USDA Organic	*Melaleuca alternifolia*	✓	✓					MAHYD(USDOrg)10	MAHYD(USDOrg)20	MAHYD(USDOrg)185	MAHYD(USDAOrg)1000
Lemon Scented Tea Tree (Citratum)	*Leptospermum petersonii*			✓				LPHYD10	LPHYD20	LPHYD185	LPHYD1000
Lavender, Australian	*Lavandula angustifolia*	✓						LAHYD10	LAHYD20	LAHYD185	LAHYD1000
Lemon Myrtle	*Backhousia citriodora*	✓		✓				BCHYD10	BCHYD20	BCHYD185	BCHYD1000
Fragonia™	*Agonis fragrans*	✓						AFHYD10	AFHYD20	AFHYD185	AFHYD1000
OTHER NATIVE INGREDIENTS											
Sandalwood Seed Oil (Bio-Active)	*Santalum spicatum*			✓	✓				SSC20	SSC185	SSC900
Kakadu Plum (Powder)	*Terminalia ferdinandiana*	✓			✓	TF1		TF10	TF20		
Tea Tree Leaf (Coarse)	*Melaleuca alternifolia*	✓		✓		MALC1		MALC10	MALC20		
Tea Tree Leaf (Fine)	*Melaleuca alternifolia*	✓		✓		MALF1		MALF10	MALF20		
Mountain Pepper Oil (Concrete)	*Tasmania lanceolate*	✓			✓	TL1		TL10	TL20		

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