

TEA TREE OIL APPLICATIONS

SENSITIVITY

Because of the popularity of tea tree oil and tea tree products, there have been an increasing number of reported cases of contact dermatitis and skin sensitivities.¹ This could be due to applying too high a dilution or neat tea tree oil; constant use of a product over 2% dilution for several months; a product that has been stored incorrectly and has oxidised; or the person could be susceptible to one or more of the constituents. The good news is that there is no lasting damage after discontinuing use. Dr Jane Greig, part of the Tea Tree Research Group (1998-2000), estimated that 5% of people would probably have some sensitivity to undiluted tea tree oil.²

To patch test a small area of skin, apply the oil or dilution to the inside of the wrist or inside of elbow and cover. Leave for 24-48 hours, and if there is no reaction, it should be safe to use.

The undiluted oil of *Melaleuca alternifolia* should not be used on large areas of skin. It is usually only used (strictly subject to a patch test) for infections on finger or toe nails, or for viral (wart-like) infections on hands or feet, in healthy adults. The undiluted oil can dry the skin and a good neutral moisturiser needs to be applied in between applications. As soon as the infection has cleared, the treatment should be stopped. Researchers in Australia found that a low dilution of 1% did not eradicate the essential flora of the skin,³ so for use in everyday toiletries the tea tree oil content should be kept to below 1%. A monograph compiled for the European Committee of Experts on Cosmetic Products - with data from Sweden's Medicinal Products Agency stated that 'only toiletries having a concentration of 2% or more seemed to cause skin reactions'.⁴ A toxicity profile for healthy adults was compiled for ATTIA, it stated that fresh tea tree oil had slight irritant potential at 50% dilution, and mild to moderate irritant potential at 75% dilution⁵. Fortunately, there is rarely any need to use it in such high concentrations. It was also suggested that steps should be taken to control oxidation, because of the drastic increase in skin irritant potential of oxidised tea tree oil.⁶ (Tea tree oil should be stored in a cool, dark place and used within the expiry date on the label).

DILUTING TEA TREE OIL

*To dilute and use tea tree oil, a carrier is needed. This can be a neutral cream, lotion, ointment, gel or a carrier oil. ***Carrier oils are vegetable, seed or nut oils and can be olive oil, grapeseed oil, sweet almond oil, coconut oil or jojoba, etc.** A carrier for a percentage dilution must not be water. Mixed oils should be stored in dark glass, airtight, containers, in a cool, dark place and used within 3 months.*

To find the dilution percentage: match the percentage amount to the number of drops of tea tree oil in a teaspoon of *carrier, i.e. 2% = 2 drops of tea tree oil topped up with carrier. 5% = 5 drops in a teaspoon topped up with carrier. Mix well and apply, after patch test.

20 drops = approximately 1ml. There are 200 drops per 10ml bottle.

A Tea Tree Oil Wash: can be mixed by adding 4 drops of tea tree oil to a teaspoon of sea salt, add to 200ml of tepid water (continue to stir or agitate well while using, to disperse the oil). This can be applied on cotton wool or sprayed onto area in a spray bottle (shake well before each spray). A cotton compress can be soaked in the antibacterial wash and applied to the area.

Mouthwash: 1 drop tea tree oil and a pinch of salt in a large glass (200ml) of tepid water can be used as a mouthwash⁷ or gargle. Again, the water needs to be stirred well before each use to disperse the oil. The mix can be put into a sprayer, shake bottle well, and two squirts maximum can be sprayed onto tonsils, if unable to gargle. Excess should be discarded. Only fresh tea tree oil that has been stored correctly should be used in the mouth, always spit out excess. The elderly or anyone with a medical condition should not use tea tree oil or salt in this area without consulting a practitioner.

Soaps: tea tree oil can also be added to neutral soaps, shampoos and hair conditioners. 10-20 drops of tea tree oil added to 100ml liquid product (mix very well) will give a 0.5% to 1% strength.

Inhalation: Add 2 drops of tea tree oil to a bowl of hot water or aromatherapy lamp. Place a few drops onto a tissue in a small bag and inhale (keep plastic bags and hot water out of the reach of children). Place a few drops onto sea or rock salt in a small airtight glass jar, inhale as necessary, always replace (child-proof) lid.

Antiseptic Creams & Ointments

Tea tree oil is used in antiseptic creams and ointments (subject to a patch test) at 2% to 5% (2-5 drops tea tree oil in a 5ml teaspoon, topped up with carrier) for most antiseptic applications. And, up to 10% for more stubborn, difficult to clear, infections.⁹ If there is no improvement after 2 weeks the treatment should be discontinued. For use on sensitive skin or in sensitive areas, dilutions should not exceed 2% (2 drops of tea tree oil in a 5ml teaspoon, topped up with carrier).

Antiseptic Oil

Tea tree oil can be mixed with carrier oil for use as an antiseptic at a dilution of 2% to 5%. 2-5 drops tea tree oil in a teaspoon topped up with carrier.

PRECAUTIONS: Tea tree oil, or any essential oil, is for external use only. It must not be used in the eye or eye area (or for young children without medical advice). Keep out of reach of children. If the user has young children, the bottles should have child-proof caps and always keep activated charcoal in the first aid kit, in case of accidental ingestion. Do not use out-of-date oils on the skin or orally. Do not use tea tree oil neat or in a high dilution (over 10%) on the skin without practitioner guidance.

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