

Aromatherapy - Essential oils

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AROMATHERAPY - ESSENTIAL OILS (PDF Version - 218 KB) This monograph is intended to serve as a guide to industry for the preparation of Product Licence Applications (PLAs) and labels for natural health product market authorization. It is not intended to be a comprehensive review of the medicinal ingredients. Notes Text in parentheses is additional optional information which can be included on the label at the applicant's discretion. The solidus (/) indicates that either term and/or statement may be selected on the label. All claims must include the qualifier "Used in aromatherapy". Restrictions when this monograph is combined with other monographs (Class II and III applications): Aromatherapy ingredients cannot be combined with other monographed medicinal ingredients if the conditions of use are not compatible (e.g., sensitizing ingredients cannot be included in products indicated for use on irritated, broken, or sensitive skin, such as in uses 1, 2, and 3 within this monograph or skin irritation relief claims in the Medicated Skin Care Products monograph). These products may be submitted as a Class III application. For products containing a combination of essential oils and other monographed medicinal ingredients, all essential oils in the product formulation must be listed as medicinal ingredients. If a product includes a 'Used in aromatherapy' claim in addition to other claims, the essential oil(s) supporting the aromatherapy claim must be specified as part of the claim (e.g., XXX is used in aromatherapy to...). Date July 25, 2025 Proper name(s), Common name(s), Source information Table 1.

Proper name(s)	Common name(s)	Source information
Source material(s)	Part(s)	Abies balsamea Balsam essential oil Balsam fir essential oil Abies balsamea Needle Twig Abies sibirica Siberian fir essential oil Abies sibirica Needle Twig Angelica archangelica Angelica essential oil Angelica archangelica Root Seed Aniba rosaeodora Rosewood essential oil Aniba rosaeodora Wood Apium graveolens Celery essential oil Celery seed essential oil Apium graveolens Seed Boswellia frereana Frankincense essential oil Olibanum essential oil Boswellia frereana Stem resin Boswellia frereana Frankincense absolute Olibanum absolute Boswellia frereana Stem resin Boswellia sacra Frankincense essential oil Olibanum essential oil Boswellia sacra Stem resin Boswellia sacra Frankincense absolute Olibanum absolute Boswellia sacra Stem resin Cananga odorata Cananga essential oil Ylang ylang essential oil Cananga odorata Flower Carum carvi Caraway essential oil Carum carvi Fruit Seed Cedrus atlantica Atlas cedarwood essential oil Cedarwood essential oil Cedrus atlantica Wood Chamaemelum nobile English chamomile essential oil Roman chamomile essential oil Chamaemelum nobile Herb top flowering Chrysopogon zizanioides Vetiver essential oil Chrysopogon zizanioides Root Cinnamomum camphora 1 Camphor essential oil White camphor essential oil Cinnamomum camphora Branch Stem Bark Wood Cinnamomum verum Cinnamon essential oil Cinnamomum verum Leaf Twig 2 Cistus ladanifer Labdanum essential oil Cistus ladanifer Gum Citrus aurantiifolia Lime essential oil Citrus aurantiifolia Unripe fruit peel Ripe fruit peel Citrus aurantium Bitter orange essential oil Neroli essential oil Citrus aurantium Flower Citrus aurantium Bitter orange absolute Neroli absolute Citrus aurantium Flower Citrus aurantium Petitgrain essential oil Petitgrain oil Paraguay Citrus aurantium Leaf Citrus bergamia Bergamot essential oil Citrus bergamia Fruit peel Citrus bergamia Bergamot (FCF) essential oil FCF = Furanocoumarin-free Citrus bergamia Fruit peel Citrus paradisi Grapefruit essential oil Citrus paradisi Fruit peel Citrus limon Lemon essential oil Citrus limon Fruit peel Citrus sinensis Orange essential oil Sweet orange essential oil Citrus sinensis Fruit peel Commiphora myrrha Myrrh essential oil Commiphora myrrha Sap resin Commiphora myrrha Myrrh absolute Commiphora myrrha Sap resin Corymbia citriodora Citron-scent gum essential oil Lemon-scent gum essential oil Corymbia citriodora Leaf Cuminum cyminum Cumin essential oil Cuminum cyminum Seed Cupressus sempervirens Italian cypress essential oil Mediterranean cypress essential oil Cupressus sempervirens Needle Twig Cymbopogon citratus Lemongrass essential oil Cymbopogon citratus Leaf Cymbopogon flexuosus East Indian lemongrass essential oil Malabar lemongrass essential oil Cymbopogon flexuosus Herb top Cymbopogon martini Palmarosa essential oil Cymbopogon martini Herb top Cymbopogon nardus Ceylon citronella essential oil Citronella essential oil Cymbopogon nardus Leaf Cymbopogon winterianus Burma citronella essential oil Java citronella essential oil Cymbopogon winterianus Herb top Elettaria cardamomum Cardamom essential oil Elettaria cardamomum Seed Eucalyptus globulus Eucalyptus essential oil Eucalyptus globulus Leaf Eucalyptus polybractea Blue mallee essential oil Eucalyptus polybractea Leaf Eucalyptus radiata Narrow-leaf peppermint

essential oil Eucalyptus radiata Leaf Foeniculum vulgare subsp. vulgare var. vulgare Bitter fennel essential oil Foeniculum vulgare subsp. vulgare var. vulgare Seed Foeniculum vulgare subsp. vulgare var. dulce Roman fennel essential oil Sweet fennel essential oil Foeniculum vulgare subsp. vulgare var. dulce Seed Helichrysum italicum Curry plant essential oil Immortelle essential oil Helichrysum italicum Herb top flowering Illicium verum Star anise essential oil Illicium verum Fruit Jasminum officinale Jasmine absolute Jasminum officinale Flower Juniperus communis Common juniper essential oil Juniper essential oil Juniperus communis Fruit Laurus nobilis Bay laurel essential oil Laurel essential oil Laurus nobilis Leaf Twig Lavandula angustifolia Lavender essential oil Lavandula angustifolia Herb top flowering Lavandula x intermedia Lavandin essential oil Lavandula x intermedia Herb top flowering Lavandula latifolia Spike lavender essential oil Lavandula latifolia Herb top flowering Litsea cubeba Litsea essential oil Litsea cubeba Fruit Matricaria chamomilla Chamomile essential oil German chamomile essential oil Matricaria chamomilla Herb top flowering Melaleuca alternifolia Tea tree essential oil Melaleuca alternifolia Leaf Twig leafy Melaleuca cajuputi Cajuput essential oil Melaleuca cajuputi Twig leafy Melaleuca quinquenervia Niaouli essential oil Melaleuca quinquenervia Leaf Melissa officinalis Lemon balm essential oil Melissa officinalis Leaf Mentha arvensis Cornmint essential oil Mentha arvensis Leaf Twig flowering Mentha x piperita Peppermint essential oil Mentha x piperita Herb flowering Leaf Twig flowering Mentha spicata Spearmint essential oil Mentha spicata Leaf Twig flowering Myristica fragrans Nutmeg essential oil Myristica fragrans Seed Myrtus communis Myrtle essential oil Myrtus communis Leaf Twig Ocimum basilicum 3 Sweet basil essential oil Ocimum basilicum Herb top flowering Origanum majorana Sweet marjoram essential oil Marjoram essential oil Origanum majorana Herb top flowering Pelargonium graveolens Rose geranium essential oil Geranium essential oil Pelargonium graveolens Leaf Herb top flowering Petroselinum crispum Parsley essential oil Petroselinum crispum Herb top Seed Pinus sylvestris Scotch pine essential oil Pinus sylvestris Needle Piper cubeba Cubeb essential oil Piper cubeba Seed Piper nigrum Black pepper essential oil Piper nigrum Fruit Pogostemon cablin Patchouli essential oil Pogostemon cablin Leaf Rosa x damascena Damask rose essential oil Rose essential oil Rosa x damascena Flower Rosa x centifolia Provence rose essential oil Rose essential oil Rosa x centifolia Flower Rosmarinus officinalis Rosemary essential oil Rosmarinus officinalis Herb top Twig leafy flowering Salvia lavandulifolia Spanish sage essential oil Salvia lavandulifolia Herb top flowering Salvia officinalis Dalmatian sage essential oil Sage essential oil Salvia officinalis Leaf Salvia sclarea Clary essential oil Clary sage essential oil Salvia sclarea Herb top flowering Santalum album East Indian sandalwood essential oil Sandalwood essential oil Santalum album Wood Satureja hortensis Savory essential oil Summer savory essential oil Satureja hortensis Herb top Styax benzoin Benzoin essential oil Styax benzoin Sap resin Syzygium aromaticum Clove essential oil Syzygium aromaticum Flower bud Leaf Stem Thymus vulgaris Thyme essential oil Thymus vulgaris Herb top Herb top flowering Thymus zygis White thyme essential oil Thymus zygis Herb top flowering Zingiber officinale Ginger essential oil Zingiber officinale Rhizome 1 Brown and yellow camphor essential oils are not permitted due to potential toxicity/carcinogenicity (Tisserand and Young 2014). 2 Cinnamomum verum essential oil from bark is not permitted due to potential toxicity/carcinogenicity (Tisserand and Young 2014). 3 The estragole chemotype of the sweet basil essential oil is not permitted due to potential toxicity/carcinogenicity (Tisserand and Young 2014). References: HC 2025, Tisserand and Young 2014, Lis-Balchin 2006, Battaglia 2003, Valnet 2001, Price and Price 1999, Davis 1997. Route(s) of administration Topical Inhalation Topical and inhalation Dosage form(s) Acceptable dosage forms are as follows: Topical (diluted products for local application and body massage): Cream; Gel; Liquid; Lotion; Oil; Ointment; Solution Topical (undiluted products for local application and body massage): Liquid* Topical (bath and compresses): Liquid* Inhalation: Liquid* Topical and Inhalation: Liquid* *Note: To be packaged in a dropper bottle. Use(s) or Purpose(s) Consult Table 2 below for uses supported for each medicinal ingredient. The medicinal ingredients in Table 2 are associated with the numbered claims below. Topical only Used in aromatherapy for symptomatic relief of acne/boils. Used in aromatherapy to help relieve minor skin irritation/cuts/bruises/burns. Used in aromatherapy for symptomatic relief of eczema/dermatitis. Used in aromatherapy to help relieve joint/muscle pain associated with sprain/strain/rheumatoid arthritis. Topical and/or inhalation Used in aromatherapy as a nervine/calmative. Used in aromatherapy to help relieve headache. Used in aromatherapy as a carminative/antispasmodic for symptomatic relief of digestive discomfort. Used in aromatherapy to help relieve colds/cough. Note: The above uses can be combined on the product label (e.g., Used in aromatherapy to help relieve headache and colds).

Table 2. Aromatherapy essential oils uses or purposes Medicinal Ingredients Uses or Purposes Abies balsamea 4, 5 Abies sibirica 4, 8 Angelica archangelica 4, 5, 6, 7, 8 Aniba rosaeodora 5, 6, 8 Apium graveolens 4, 5 Boswellia frereana (essential oil) 2, 5, 8 Boswellia frereana (absolute) 2, 5, 8 Boswellia sacra (essential oil) 2, 5, 8 Boswellia sacra (absolute) 2, 5, 8 Cananga odorata 5 Carum carvi 7, 8 Cedrus atlantica 1, 2, 4, 5, 8 Chamaemelum nobile 5, 7 Chrysopogon zizanioides 1, 4 Cinnamomum camphora 4, 8 Cinnamomum verum 4, 8 Cistus ladanifer 4, 5, 7 Citrus aurantiifolia 1, 4, 8 Citrus aurantium (Neroli - flower) (essential oil) 5, 6, 7, 8 Citrus aurantium (Neroli - flower) (absolute) 5, 6, 7, 8 Citrus aurantium (Petitgrain - leaf) 4, 5 Citrus bergamia (expressed) 6, 7, 8 Citrus bergamia (expressed - rectified) (FCF) 1, 2, 3, 6, 7, 8 Citrus paradisi 5 Citrus limon 8

Citrus sinensis 5, 7 *Commiphora myrrha* (essential oil) 2, 3, 8 *Commiphora myrrha* (absolute) 2, 3, 8 *Corymbia citriodora* 4, 6, 8 *Cuminum cyminum* 4, 5, 7 *Cupressus sempervirens* 4, 8 *Cymbopogon citratus* 4, 5, 6, 7 *Cymbopogon flexuosus* 4, 5, 6, 7 *Cymbopogon martini* 5, 8 *Cymbopogon nardus* 4, 6, 7 *Cymbopogon winterianus* 4, 6, 7 *Elettaria cardamomum* 7, 8 *Eucalyptus globulus* 4, 6, 8 *Eucalyptus polybractea* 4, 6, 8 *Eucalyptus radiata* 4, 6, 8 *Foeniculum vulgare* subsp. *vulgare* var. *vulgare* 2, 4, 7, 8 *Foeniculum vulgare* subsp. *vulgare* var. *dulce* 2, 4, 7, 8 *Helichrysum italicum* 1, 2, 3, 4, 5, 7, 8 *Illicium verum* 4, 5, 6, 7, 8 *Jasminum officinale* 4, 5, 6, 8 *Juniperus communis* 1, 2, 3, 4, 5 *Laurus nobilis* 4, 5, 6, 8 *Lavandula angustifolia* 4, 5, 6, 7, 8 *Lavandula x intermedia* 4, 5, 6, 7, 8 *Lavandula latifolia* 4, 5, 6, 7, 8 *Litsea cubeba* 7 *Matricaria chamomilla* 1, 2, 4, 5, 6, 7 *Melaleuca alternifolia* 8 *Melaleuca cajuputi* 1, 3, 4, 8 *Melaleuca quinquenervia* 8 *Melissa officinalis* 5, 7 *Mentha arvensis* 1, 4, 5, 7, 8 *Mentha x piperita* 4, 5, 7, 8 *Mentha spicata* 5, 6, 7, 8 *Myristica fragrans* 4, 5, 7 *Myrtus communis* 1, 8 *Ocimum basilicum* 5, 6, 7, 8 *Origanum majorana* 2, 3, 4, 5, 6, 7, 8 *Pelargonium graveolens* 8 *Petroselinum crispum* 2, 4, 5 *Pinus sylvestris* 4, 5, 8 *Piper cubeba* 2, 7, 8 *Piper nigrum* 4, 6, 7, 8 *Pogostemon cablin* 1, 2, 5, 7 *Rosa x damascena* 2, 5, 6, 8 *Rosa x centifolia* 2, 5, 6, 8 *Rosmarinus officinalis* 2, 4, 7, 8 *Salvia lavandulifolia* 2, 4, 5, 7, 8 *Salvia officinalis* 2, 4, 5, 7, 8 *Salvia sclarea* 4, 5, 6, 7, 8 *Santalum album* 5, 6, 7, 8 *Satureja hortensis* 4, 7, 8 *Styrax benzoin* 4, 5, 7, 8 *Syzygium aromaticum* 4, 8 *Thymus vulgaris* 1, 2, 4, 5, 8 *Thymus zygis* 1, 2, 4, 5, 8 *Zingiber officinale* 4, 7, 8

References: HC 2025, Tisserand and Young 2014, Lis-Balchin 2006, Battaglia 2003.

Dose(s) Subpopulation(s) Adults 18 years and older Quantity(ies) Refer to Tables 3, 4, 5 and 6 below.

Notes See Appendix 1 for definitions of various preparations (i.e. steam distilled, expressed, absolute, rectified). The concentrations in Table 3 below refer to final concentrations after dilution to be applied on the skin. The quantity per dosage unit for undiluted (pure) essential oils should be indicated as a value between 99 - 100% (Table 4) on the PLA form with appropriate dilution information in the Directions for use section.

Table 3. Topical application - massage or local application: Methods of preparations and concentrations associated with each medicinal ingredient

Medicinal Ingredients	Methods of Preparations	Concentrations for topical application for massage	Concentrations for topical local application
1	1	1	2
Sensitizing (S) and Phototoxic (P) essential oils	3	Abies balsamea Oil, Essential (water steam distillation) 1 - 5% 1 - 10% N/A	Abies sibirica Oil, Essential (water steam distillation) 1 - 2.5% 1 - 2.5% N/A
Angelica archangelica Oil, Essential (water steam distillation) 0.78% 0.78% S, P	Aniba rosaeodora Oil, Essential (water steam distillation) 1 - 5% 1 - 10% S	Apium graveolens Oil, Essential (water steam distillation) 1 - 4% 1 - 4% S, P	Boswellia frereana Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A
Boswellia frereana Absolute 1 - 3% 1 - 3% N/A	Boswellia sacra Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A	Boswellia sacra Absolute 1 - 3% 1 - 3% N/A	Cananga odorata Oil, Essential (water steam distillation) 0.8 - 2% 0.8 - 2% S
Carum carvi Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A	Cedrus atlantica Oil, Essential (water steam distillation) 1 - 5% 1 - 8% P	Chamaemelum nobile Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A	Chrysopogon zizanioides Oil, Essential (water steam distillation) 1 - 1.5% 1 - 1.5% N/A
Cinnamomum camphora Oil, Essential (water steam distillation) 1 - 5% 1 - 20% S	Cinnamomum verum Oil, Essential (water steam distillation) 0.6 - 5% 0.6 - 5% S	Cistus ladanifer Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A	Citrus aurantiifolia Oil, Essential (expressed) Unripe fruit peel: 0.7% Unripe fruit peel: 0.7% P
Citrus aurantium (Neroli - flower) Oil, Essential (water steam distillation) 1 - 4% 1 - 4% S, P	Citrus aurantium (Neroli - flower) Absolute 1 - 3% 1 - 3% S, P	Citrus aurantium (Petitgrain - leaf) Oil, Essential (water steam distillation) 1 - 5% 1 - 10% S, P	Citrus bergamia Oil, Essential (expressed) 0.4% 0.4% S, P
Citrus bergamia (FCF) Oil, Essential (expressed - rectified) 1 - 5% 1 - 20% P	Citrus paradisi Oil, Essential (expressed) 1 - 4% 1 - 4% P	Citrus limon Oil, Essential (expressed) 1 - 2% 1 - 2% S, P	Citrus sinensis Oil, Essential (expressed) 1 - 5% 1 - 10% S, P
Commiphora myrrha Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A	Commiphora myrrha Absolute 1 - 3% 1 - 3% N/A	Corymbia citriodora Oil, Essential (water steam distillation) 1 - 5% 1 - 20% S	Cuminum cyminum Oil, Essential (water steam distillation) 0.4% 0.4% P
Cupressus sempervirens Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A	Cymbopogon citratus Oil, Essential (water steam distillation) 0.7 - 4% 0.7 - 4% S	Cymbopogon flexuosus Oil, Essential (water steam distillation) 1 - 4% 1 - 4% S	Cymbopogon martini Oil, Essential (water steam distillation) 1 - 5% 1 - 6.5% S
Cymbopogon nardus Oil, Essential (water steam distillation) 1% 1% S	Cymbopogon winterianus Oil, Essential (water steam distillation) 1% 1% S	Elettaria cardamomum Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A	Eucalyptus globulus Oil, Essential (water steam distillation) 1 - 5% 1 - 20% S
Eucalyptus polybractea Oil, Essential (water steam distillation) 1 - 5% 1 - 20% S	Eucalyptus radiata Oil, Essential (water steam distillation) 1 - 5% 1 - 20% S	Foeniculum vulgare subsp. <i>vulgare</i> var. <i>vulgare</i> Oil, Essential (water steam distillation) 1 - 1.8% 1 - 1.8% N/A	Foeniculum vulgare subsp. <i>vulgare</i> var. <i>dulce</i> Oil, Essential (water steam distillation) 1 - 2.5% 1 - 2.5% N/A
Helichrysum italicum Oil, Essential (water steam distillation) 0.5% 0.5% N/A	Illicium verum Oil, Essential (water steam distillation) 1 - 1.75% 1 - 1.75% S	Jasminum officinale Absolute 0.7% 0.7% S	Juniperus communis Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A
Laurus nobilis Oil, Essential (water steam distillation) 0.5% 0.5% S	Lavandula angustifolia Oil, Essential (water steam distillation) 1 - 5% 1 - 15% S, P	Lavandula x	

intermedia Oil, Essential (water steam distillation) 1 - 5% 1 - 5% S, P Lavandula latifolia Oil, Essential (water steam distillation) 1 - 5% 1 - 8% S, P Litsea cubeba Oil, Essential (water steam distillation) 0.8% 0.8% S Matricaria chamomilla Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A Melaleuca alternifolia Oil, Essential (water steam distillation) 1% 1% S Melaleuca cajuputi Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A Melaleuca quinquenervia Oil, Essential (water steam distillation) 1 - 5% 1 - 10% S Melissa officinalis Oil, Essential (water steam distillation) 0.7% 0.7% S Mentha arvensis Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A Mentha x piperita Oil, Essential (water steam distillation) 1 - 5% 1 - 5.4% S Mentha spicata Oil, Essential (water steam distillation) 1 - 4% 1 - 4% S Myristica fragrans Oil, Essential (water steam distillation) 0.8% 0.8% N/A Myrtus communis Oil, Essential (water steam distillation) 1 - 1.9% 1 - 1.9% N/A Ocimum basilicum Oil, Essential (water steam distillation) 1 - 3.3% 1 - 3.3% S Origanum majorana Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A Pelargonium graveolens Oil, Essential (water steam distillation) 1 - 5% 1 - 10% S Petroselinum crispum Oil, Essential (water steam distillation) Herb top: 1 - 2% Herb top: 1 - 2% N/A Seed: 1 - 1.1% Seed: 1 - 1.1% N/A Pinus sylvestris Oil, Essential (water steam distillation) 1 - 5% 1 - 10% S Piper cubeba Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A Piper nigrum Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A Pogostemon cablin Oil, Essential (water steam distillation) 1 - 5% 1 - 10% N/A Rosa x damascena Oil, Essential (water steam distillation) 0.6% 0.6% S Rosa x centifolia Oil, Essential (water steam distillation) 1 - 2% 1 - 2% N/A Rosmarinus officinalis Oil, Essential (water steam distillation) 1 - 5% 1 - 6.5% N/A Salvia lavandulifolia Oil, Essential (water steam distillation) 1 - 5% 1 - 12.5% N/A Salvia officinalis Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A Salvia sclarea Oil, Essential (water steam distillation) 1 - 5% 1 - 8% S Santalum album Oil, Essential (water steam distillation) 1 - 5% 1 - 10% S Satureja hortensis Oil, Essential (water steam distillation) 0.5 % 0.5 % N/A Styrax benzoin Oil, Essential (water steam distillation) 1 - 2% 1 - 2% Syzygium aromaticum Oil, Essential (water steam distillation) Flower bud: 0.5 - 4% Flower bud: 0.5 - 4% S Leaf; Stem: 0.6 - 2% Leaf; Stem: 0.6 - 2% S Thymus vulgaris Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A Thymus zygis Oil, Essential (water steam distillation) 1 - 5% 1 - 8% N/A Zingiber officinale Oil, Essential (water steam distillation) 1 - 4% 1 - 4% N/A

1 This section refers to minimum and maximum concentrations after dilution for body massage (covering more than 10% of body surface area). 2 This section refers to minimum and maximum concentrations after dilution for local applications (covering up to 10% of body surface area). 3 (S) - Sensitizing: For definition, see Appendix 1. Additional duration of use and risk statements are required for medicinal ingredients indicated as sensitizing. Refer to Risk information section. Sensitizing ingredients cannot be included in products intended for use on irritated, broken or sensitive skin. (P) - Phototoxic: For definition, see Appendix 1. Additional risk statements are required for medicinal ingredients indicated as phototoxic. Refer to Risk information section. References: HC 2025, Tisserand and Young 2014, Lis-Balchin 2006, Battaglia 2003. Table 4. Topical application - massage or local application: Methods of preparations and concentrations for undiluted products 1 Medicinal Ingredients Methods of Preparation 3 Concentration for single ingredient products or total concentration of ingredients from Table 1 for multi-ingredient products Any ingredient listed in Table 1 2 Absolute Oil, Essential (water steam distillation) Oil, Essential (expressed) Oil, Essential (expressed- rectified) 99 - 100% 4 1 The quantity per dosage unit for undiluted (pure) essential oils should be indicated as a value between 99 - 100% on the PLA form with appropriate dilution information (such as mixing XX drops of the product in YY mL of carrier oil) in the Directions for use section to meet the concentrations listed in Table 3 once diluted. 2 Sensitizing ingredients cannot be included in products intended for use on irritated, broken or sensitive skin. 3 The appropriate method of preparation associated with each essential oil is listed in Table 3. 4 A minimum concentration of 99% has been included to allow for the addition of a non-medicinal ingredient with a preservative antioxidant purpose as needed. Table 5. Topical application - bath or compresses: Methods of preparations and concentration for all medicinal ingredients listed in Table 1 Medicinal Ingredients Methods of Preparations 2 Concentration for single ingredient products or total concentration of ingredients from Table 1 for multi-ingredient products Any ingredient listed in Table 1 1 Absolute Oil, Essential (water steam distillation) Oil, Essential (expressed) Oil, Essential (expressed- rectified) 99 - 100% 3 1 Sensitizing ingredients cannot be included in products intended for use on irritated, broken or sensitive skin. 2 The appropriate method of preparation associated with each essential oil is listed in Table 3. 3 If a combination of essential oils is used, the total concentration of essential oils must be a value between 99 – 100% and each essential oil included in the combination must contribute to the recommended uses for the product. A minimum concentration of 99% has been included to allow for the addition of a non-medicinal ingredient with a preservative antioxidant purpose as needed. Table 6. Inhalation - tissue or steaming water: Methods of preparations and concentration for all medicinal ingredients listed in Table 1 Medicinal Ingredients Methods of Preparations 1 Concentration for single ingredient products or total concentration of ingredients from Table 1 for multi-ingredient products Any ingredient listed in Table 1 Absolute Oil, Essential (water steam distillation) Oil, Essential (expressed) Oil, Essential (expressed- rectified) 99 - 100% 2 1 The appropriate method of preparation associated with each essential oil is listed in Table 3. 2 If a combination of essential oils is used, the total concentration of essential oils must be a value between 99 -

100% and each essential oil included in the combination must contribute to the recommended uses for the product. A minimum concentration of 99% has been included to allow for the addition of a non-medicinal ingredient with a preservative antioxidant purpose as needed. Ingredient Combinations All ingredients included in this monograph may be combined together with the following restrictions: For local topical application/body massage, the total concentration of the combined essential oils must not exceed 5%; and Each essential oil in the product combination must not exceed its maximum concentrations listed in Table 3. Direction(s) for use Topical Local application (10% or less of body surface area) Apply to a small body area only, 1 to 3 times per day. Rub and/or massage into skin until solution vanishes. Body massage (more than 10% of the body surface area) Apply as a body massage once daily. Rub and/or massage into skin until solution vanishes. Products requiring dilution (topical) Do not use the product undiluted. Mix XX drops of the product in YY ml of carrier oil prior to applying on the skin 1 . 1 Notes Single ingredient products Directions for use explaining appropriate dilution of the product in carrier oil must be included on the PLA form and label. The final concentration to be applied on the skin must meet the concentrations in Table 3. The following information is required on the PLA form to calculate the final concentration of the product: The number of drops of the product (XX) to be diluted in the carrier oil. The volume of the drop (ml) (e.g. 0.05 ml). The volume of the carrier oil (YY) (i.e. fixed oil used to dilute essential oils and absolutes) (ml). Please note that the consumer must be able to measure this volume accurately in the absence of a measuring device (e.g. 5 ml = 1 teaspoon). Formula to obtain the final concentration of the product: Final concentration of the product (%) = # of drops of the product * Volume of the drop (ml) * 100/Final volume (ml) Note: Final volume (ml) = [# of drops of the product * Volume of the drop (ml)] + Volume of carrier oil (ml) Combination products Directions for use explaining appropriate dilution of the product in carrier oil must be included on the PLA form and label. The final concentration to be applied on the skin must meet the concentrations in Table 3 for each medicinal ingredient and not exceed a total concentration of 5%. The following information is required on the PLA form for each medicinal ingredient to calculate the final concentration of each medicinal ingredient and of the finished product: The number of drops of the product (XX) to be diluted in the carrier oil. The volume of each medicinal ingredient per drop (ml). The volume of the carrier oil (YY) (i.e. fixed oil used to dilute essential oils and absolutes) (ml) (the same value for each medicinal ingredient). Please note that the consumer must be able to measure this volume accurately in the absence of a measuring device (e.g. 5 ml). Formula to obtain the final concentration of each medicinal ingredient (MI): Final concentration of the MI (%) = # of drops of the product * Volume of the MI per drop (ml) * 100/Final volume (ml) Note: Final volume (ml) = [# of drops of the product * Volume of the drop (ml)] + Volume of carrier oil (ml) Formula to obtain the final concentration of the finished product (maximum concentration of combined medicinal ingredient is 5%): Final concentration of the product (%) = # of drops of the product * Volume of all MI per the drop (ml) * 100/Final volume (ml) Notes: The volume of all medicinal ingredients (MI) per drop (ml) in the formula below = sum of the volumes of each medicinal ingredient per drop (ml) Final volume (ml) = [# of drops of the product * Volume of the drop (ml)] + Volume of carrier oil (ml) Bath Add 2 - 8 drops of undiluted product with the same amount of shampoo or liquid soap before adding it to the bath. Mix the water gently. For maximum benefit, remain in the bath for 10 minutes. Use 2 drops of undiluted product the first time and increase by 1 drop per bath up to a maximum of 8 drops. Use once daily (Tisserand 1977; Price and Price 2007). Compresses Add 2 drops of undiluted product to 500 ml of warm water in a bottle. Mix by shaking the bottle and immediately soak the compress. Squeeze lightly, apply the compress to the skin, and cover with clothes and/or towelling. Leave for 2 to 4 hours. Use 1 to 3 times per day (Tisserand 1977). Inhalation Handkerchief/tissue Apply 1 - 6 drops of undiluted product to a handkerchief/tissue and inhale occasionally. Use 1 to 3 times per day (Price and Price 2007). Steaming water/facial steamer Add 3 - 12 drops of undiluted product to a bowl of steaming water/facial steamer. Inhale slowly and deeply for 5 to 10 minutes. Use 1 to 3 times per day (Price and Price 1999; Tisserand and Balacs 1995). Duration(s) of use All products For occasional use only. Risk information All products Caution(s) and warning(s) For external use only. When using this product avoid contact with eyes and mucous membranes. If contact occurs, rinse thoroughly with water/vegetable oil. Ask a health care practitioner/health care provider/health care professional/doctor/physician if symptoms persist or worsen. Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you have epilepsy or asthma (Tisserand and Young 2014). Keep out of reach of children. If swallowed, call a poison control centre or get medical help right away Contraindication(s) Do not use this product if you are pregnant or breastfeeding. Known adverse reaction(s) Stop use if you experience nausea, dizziness, headache, an allergic reaction or skin irritation (Tisserand and Young 2014). Products for topical application (local application/body massage/bath/compresses) Caution(s) and warning(s) All products (except products that contain phototoxic essential oils; refer to Table 3) When using this product avoid exposure of applied area to the sun. Products that contain phototoxic essential oils (refer to Table 3) When using this product do not expose the applied area to the sun for 24 to 48 hours after application (Kumar et al. 1992). Contraindication(s) Do not use on broken, irritated, or sensitive skin. Products that contain Cananga odorata essential oil >0.8% and/or Cinnamomum

verum essential oil >0.6% and/or *Cymbopogon citratus* essential oil >0.7% and/or *Mentha spicata* >1.7% and/or *Syzygium aromaticum* flower bud essential oil >0.5% and/or *Syzygium aromaticum* leaf or stem essential oil >0.6% Do not use if you are prone to allergic reactions, eczema or unusual skin reactions. Products intended to help relieve colds/cough Known adverse reaction(s) Stop use and ask a health care practitioner/health care provider/health care professional/doctor/physician if symptoms are accompanied by a fever, rash, persistent headache or chronic lung condition. Non-medicinal ingredients Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database. The addition of a non-medicinal ingredient with a preservative antioxidant purpose to the product formulation is recommended. Products supported by this monograph cannot include any essential oils as non-medicinal ingredients. Storage conditions Must be established in accordance with the requirements described in the Natural Health Products Regulations. All products (information for industry; not for labelling) Child-resistant packaging/containers should be used (JC 2025). Store in airtight, light-resistant container at room temperature or in a refrigerator (Tisserand and Young 2014). Specifications The finished product specifications must be established in accordance with the requirements described in the Natural and Non-Prescription Health Products Directorate (NNHPD) Quality of Natural Health Products Guide. The medicinal ingredient must comply with the requirements outlined in the NHPID. Essential oils rich in linalool or limonene should only be used when the level of peroxides is kept to the lowest practical value. The addition of antioxidants at the time of production is recommended for these essential oils (Tisserand and Young 2014; IFRA 2004).

EXAMPLE OF PRODUCT FACTS: Consult the Guidance Document, Labelling of Natural Health Products for more details. References cited AHPA 2012: American Herbal Products Association Guidance Policies: Trade Requirement & Guidance Policy for Labeling of Undiluted Essential Oils Used Topically and Offered for Retail Sale; Adopted 2012 and revised 2023, [Accessed 2025 March 6]. Available from: https://www.ahpa.org//Files/Document%20Library/AHPAGuidancePolicies/23_1024%20AHPA%20Guidance_Labeling_Essential_Oils_Retail.pdf Battaglia, S. The Complete Guide to Aromatherapy, 2nd ed. Brisbane (AU): The International Centre of Holistic Aromatherapy; 2003. Davis P. Aromatherapy An A-Z. Saffron Walden, (GB): The C.W. Daniel Company Limited; 1997. HC 2025: Health Canada, Natural Health Product Ingredients Database: Counterirritants; 2025. [Published 2025 January 10]. Available from: <https://webprod.hc-sc.gc.ca/nhp-id-bdipsn/atReq?atid=counter2&lang=eng> IFRA 2004: IFRA Standards, including amendments. International Fragrance Association, Brussels; 2004. [Accessed 2025 March 6]. Available from : <https://ifrafragrance.org/> JC 2025: Justice Canada. Food and Drug Regulations. Cautionary Statements and Child Resistant Packages. Sections C.01.001 (2) to (4) and C.01.029, C.01.031 and C.01.031.2 (1). Ottawa (ON): Justice Laws Website. [Accessed 2025 July 22]. Available from: https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._870/ Kumar JR, Ranadive NS, Menon A, Haberman HF. Photoinduced cutaneous inflammatory response by psoralens. Journal of Photochemistry and Photobiology 1992;14(1-2):125-137. Lis-Balchin M. Aromatherapy Science: A guide for healthcare professionals. London (GB): Pharmaceutical Press; 2006. Price S, Price L. Aromatherapy for Health Professionals, 3rd edition. Edinburgh (GB): Churchill Livingstone; 2007. Tisserand RB. The Art of Aromatherapy: The healing and beautifying properties of the essential oils of flowers and herbs. Rochester (VT): Healing Arts Press; 1977. Tisserand R, Young R. Essential oil safety: A guide for health care professionals, 2nd edition. Edinburgh (GB): Churchill Livingstone; 2014. Valnet J. Aromathérapie, 11th edition. Paris (F): Vigot; 2001. References cited Battaglia, S. The Complete Guide to Aromatherapy. Brisbane (AU): The Perfect Potion; 1995. British Pharmacopoeia Commission. British pharmacopoeia 2013. (Vols. IV and V) London (GB): The Stationary Office; 2012. Carson CF, Hammer KA, Riley TV. Melaleuca alternifolia (tea tree) oil: A review of antimicrobial and other medicinal properties. Clinical Microbiology Reviews 2006;19(1):50-62. Council of Europe. European pharmacopeia. (Vol. 1). Strasbourg, France: Directorate for the Quality of Medicines & Health Care; 2010. Price S, Price L. Aromatherapy for Health Professionals, 2nd edition. Edinburgh (GB): Churchill Livingstone; 1999. Price S, Price L. Aromatherapy for Health Professionals, 4th edition. Edinburgh (GB): Churchill Livingstone; 2012. Tisserand R, Balacs T. Essential oil safety: A guide for health care professionals. Edinburgh (GB): Churchill Livingstone; 1995. USP-NF 2024: United States Pharmacopeia and the National Formulary. Rockville (MD): United States Pharmacopeial Convention, Inc.; 2024. USDA 2025: United States Department of Agriculture, Agricultural Research Service (USDA ARS), Germplasm Resources Information Network (GRIN) - Global. U.S. National Plant Germplasm System; 2025. [Accessed 2025 January 21]. Available from: <https://npgsweb.ars-grin.gov/gringlobal/taxon/taxonomysearch> Worwood VA. The complete book of essential oils and aromatherapy. Novato (CA): New World Library; 1991.

Appendix 1 Definitions Steam distilled: Natural raw material is placed in or above water in a retort and exposed to steam, which carries the volatile oils into a condenser where the mixture is cooled. The oils separate from the water and can be collected (AHPA 2012). Expressed: Used primarily to obtain citrus essential oils. The fruit is punctured and then mechanically pressed. No external heat is applied during the extraction process (AHPA 2012). Absolute: Product of solvent extraction. A solvent is used to extract the oils from the plant material in which the product is called a “concrete” (mixture of essential oil, waxes, resins, and other lipophilic (oil soluble)

plant material). A more polar solvent is added to the concrete to extract the essential oil. The alcohol is evaporated and leaves behind the absolute (AHPA 2012). Rectified: Essential oil is purified by fractional distillation in order to remove unwanted constituents (Tisserand and Young 2014). Sensitizing: Sensitizing essential oils can cause sensitization reaction, also known as allergic contact dermatitis, which is the usual clinical consequence of delayed hypersensitivity. Sensitizing oils cause more pronounced effect on patients with rash, dermatitis, eczema, sensitive skin and other skin conditions (Tisserand and Young 2014). These essential oils cause toxic effect after multiple applications (Lis-Balchin 2006). Phototoxic: Phototoxic essential oils produce burns, dermatitis, etc. (phototoxic effects) when the treated skin area is exposed to direct sunlight. Phototoxic effects generally occur due to inherent furanocoumarin content (Tisserand and Young 2014). Carrier Oil: Carrier oil is fixed oil used to dilute essential oils and absolutes before they are applied to the skin. Some of examples of carrier oils are Sweet almond oil, Grape seed oil, Sunflower oil, Apricot kernel oil, and Peach kernel oil (Price and Price 2007). Report a problem on this page Date modified: 2019-03-01

MEDICINAL INGREDIENT(S)

Notes Text in parentheses is additional optional information which can be included on the label at the applicant's discretion. The solidus (/) indicates that either term and/or statement may be selected on the label. All claims must include the qualifier "Used in aromatherapy". Restrictions when this monograph is combined with other monographs (Class II and III applications): Aromatherapy ingredients cannot be combined with other monographed medicinal ingredients if the conditions of use are not compatible (e.g., sensitizing ingredients cannot be included in products indicated for use on irritated, broken, or sensitive skin, such as in uses 1, 2, and 3 within this monograph or skin irritation relief claims in the Medicated Skin Care Products monograph). These products may be submitted as a Class III application. For products containing a combination of essential oils and other monographed medicinal ingredients, all essential oils in the product formulation must be listed as medicinal ingredients. If a product includes a 'Used in aromatherapy' claim in addition to other claims, the essential oil(s) supporting the aromatherapy claim must be specified as part of the claim (e.g., XXX is used in aromatherapy to...). Date July 25, 2025

USE(S) OR PURPOSE(S)

Medicinal Ingredients Uses or Purposes Abies balsamea⁴, 5 Abies sibirica⁴, 8 Angelica archangelica⁴, 5, 6, 7, 8 Aniba rosaeodora⁵, 6, 8 Apium graveolens⁴, 5 Boswellia frereana (essential oil)², 5, 8 Boswellia frereana (absolute)², 5, 8 Boswellia sacra (essential oil)², 5, 8 Boswellia sacra (absolute)², 5, 8 Cananga odorata⁵ Carum carvi⁷, 8 Cedrus atlantica¹, 2, 4, 5, 8 Chamaemelum nobile⁵, 7 Chrysopogon zizanioides¹, 4 Cinnamomum camphora⁴, 8 Cinnamomum verum⁴, 8 Cistus ladanifer⁴, 5, 7 Citrus aurantiifolia¹, 4, 8 Citrus aurantium (Neroli - flower) (essential oil)⁵, 6, 7, 8 Citrus aurantium (Neroli - flower) (absolute)⁵, 6, 7, 8 Citrus aurantium (Petitgrain - leaf)⁴, 5 Citrus bergamia (expressed)⁶, 7, 8 Citrus bergamia (expressed - rectified) (FCF)¹, 2, 3, 6, 7, 8 Citrus paradisi⁵ Citrus limon⁸ Citrus sinensis⁵, 7 Commiphora myrrha (essential oil)², 3, 8 Commiphora myrrha (absolute)², 3, 8 Corymbia citriodora⁴, 6, 8 Cuminum cyminum⁴, 5, 7 Cupressus sempervirens⁴, 8 Cymbopogon citratus⁴, 5, 6, 7 Cymbopogon flexuosus⁴, 5, 6, 7 Cymbopogon martini⁵, 8 Cymbopogon nardus⁴, 6, 7 Cymbopogon winterianus⁴, 6, 7 Elettaria cardamomum⁷, 8 Eucalyptus globulus⁴, 6, 8 Eucalyptus polybractea⁴, 6, 8 Eucalyptus radiata⁴, 6, 8 Foeniculum vulgare subsp. vulgare var. vulgare², 4, 7, 8 Foeniculum vulgare subsp. vulgare var. dulce², 4, 7, 8 Helichrysum italicum¹, 2, 3, 4, 5, 7, 8 Illium verum⁴, 5, 6, 7, 8 Jasminum officinale⁴, 5, 6, 8 Juniperus communis¹, 2, 3, 4, 5 Laurus nobilis⁴, 5, 6, 8 Lavandula angustifolia⁴, 5, 6, 7, 8 Lavandula x intermedia⁴, 5, 6, 7, 8 Lavandula latifolia⁴, 5, 6, 7, 8 Litsea cubeba⁷ Matricaria chamomilla¹, 2, 4, 5, 6, 7 Melaleuca alternifolia⁸ Melaleuca cajuputi¹, 3, 4, 8 Melaleuca quinquenervia⁸ Melissa officinalis⁵, 7 Mentha arvensis¹, 4, 5, 7, 8 Mentha x piperita⁴, 5, 7, 8 Mentha spicata⁵, 6, 7, 8 Myristica fragrans⁴, 5, 7 Myrtus communis¹, 8 Ocimum basilicum⁵, 6, 7, 8 Origanum majorana², 3, 4, 5, 6, 7, 8 Pelargonium graveolens⁸ Petroselinum crispum², 4, 5 Pinus sylvestris⁴, 5, 8 Piper cubeba², 7, 8 Piper nigrum⁴, 6, 7, 8 Pogostemon cablin¹, 2, 5, 7 Rosa x damascena², 5, 6, 8 Rosa x centifolia², 5, 6, 8 Rosmarinus officinalis², 4, 7, 8 Salvia lavandulifolia², 4, 5, 7, 8 Salvia officinalis², 4, 5, 7, 8 Salvia sclarea⁴, 5, 6, 7, 8 Santalum album⁵, 6, 7, 8 Satureja hortensis⁴, 7, 8 Styrax benzoin⁴, 5, 7, 8 Syzygium aromaticum⁴, 8 Thymus vulgaris¹, 2, 4, 5, 8 Thymus zygis¹, 2, 4, 5, 8 Zingiber officinale⁴, 7, 8

RISK INFORMATION

Table 4. Topical application - massage or local application: Methods of preparations and concentrations for undiluted products

Medicinal Ingredients	Methods of Preparation	Concentration for single ingredient products or total concentration of ingredients from Table 1 for multi-ingredient products
Any ingredient listed in Table 1	1 Absolute Oil, Essential (water steam distillation) Oil, Essential (expressed) Oil, Essential (expressed-rectified)	99 - 100%

1 The quantity per dosage unit for undiluted (pure) essential oils should be indicated as a value between 99 - 100% on the PLA form with appropriate dilution information (such as mixing XX drops of the product in YY mL of carrier oil) in the Directions for use section to meet the concentrations listed in Table 3 once diluted.

2 Sensitizing ingredients cannot be included in products intended for use on irritated, broken or sensitive skin.

3 The appropriate method of preparation associated with each essential oil is listed in Table 3.

4 A minimum concentration of 99% has been included to allow for the addition of a non-medicinal ingredient with a preservative antioxidant purpose as needed.

Table 5. Topical application - bath or compresses: Methods of preparations and concentration for all medicinal ingredients listed in Table 1

Medicinal Ingredients	Methods of Preparations	Concentration for single ingredient products or total concentration of ingredients from Table 1 for multi-ingredient products
Any ingredient listed in Table 1	1 Absolute Oil, Essential (water steam distillation) Oil, Essential (expressed) Oil, Essential (expressed-rectified)	99 - 100%

1 Sensitizing ingredients cannot be included in products intended for use on irritated, broken or sensitive skin.

2 The appropriate method of preparation associated with each essential oil is listed in Table 3.

3 If a combination of essential oils is used, the total concentration of essential oils must be a value between 99 - 100% and each essential oil included in the combination must contribute to the recommended uses for the product. A minimum concentration of 99% has been included to allow for the addition of a non-medicinal ingredient with a preservative antioxidant purpose as needed.

Table 6. Inhalation - tissue or steaming water: Methods of preparations and concentration for all medicinal ingredients listed in Table 1

Medicinal Ingredients	Methods of Preparations	Concentration for single ingredient products or total concentration of ingredients from Table 1 for multi-ingredient products
Any ingredient listed in Table 1	1 Absolute Oil, Essential (water steam distillation) Oil, Essential (expressed) Oil, Essential (expressed-rectified)	99 - 100%

1 The appropriate method of preparation associated with each essential oil is listed in Table 3.

2 If a combination of essential oils is used, the total concentration of essential oils must be a value between 99 - 100% and each essential oil included in the combination must contribute to the recommended uses for the product. A minimum concentration of 99% has been included to allow for the addition of a non-medicinal ingredient with a preservative antioxidant purpose as needed.

Ingredient Combinations All ingredients included in this monograph may be combined together with the following restrictions: For local topical application/body massage, the total concentration of the combined essential oils must not exceed 5%; and Each essential oil in the product combination must not exceed its maximum concentrations listed in Table 3.

Direction(s) for use

Topical Local application (10% or less of body surface area) Apply to a small body area only, 1 to 3 times per day. Rub and/or massage into skin until solution vanishes. Body massage (more than 10% of the body surface area) Apply as a body massage once daily. Rub and/or massage into skin until solution vanishes. Products requiring dilution (topical) Do not use the product undiluted. Mix XX drops of the product in YY ml of carrier oil prior to applying on the skin.

1. Notes

Single ingredient products Directions for use explaining appropriate dilution of the product in carrier oil must be included on the PLA form and label. The final concentration to be applied on the skin must meet the concentrations in Table 3. The following information is required on the PLA form to calculate the final concentration of the product: The number of drops of the product (XX) to be diluted in the carrier oil. The volume of the drop (ml) (e.g. 0.05 ml). The volume of the carrier oil (YY) (i.e. fixed oil used to dilute essential oils and absolutes) (ml). Please note that the consumer must be able to measure this volume accurately in the absence of a measuring device (e.g. 5 ml = 1 teaspoon). Formula to obtain the final concentration of the product: Final concentration of the product (%) = # of drops of the product * Volume of the drop (ml) * 100 / Final volume (ml)

Note: Final volume (ml) = [# of drops of the product * Volume of the drop (ml)] + Volume of carrier oil (ml)

Combination products Directions for use explaining appropriate dilution of the product in carrier oil must be included on the PLA form and label. The final concentration to be applied on the skin must meet the concentrations in Table 3 for each medicinal ingredient and not exceed a total concentration of 5%. The following information is required on the PLA form for each medicinal ingredient to calculate the final concentration of each medicinal ingredient and of the finished product: The number of drops of the product (XX) to be diluted in the carrier oil. The volume of each medicinal ingredient per drop (ml). The volume of the carrier oil (YY) (i.e. fixed oil used to dilute essential oils and absolutes) (ml) (the same value for each medicinal

ingredient). Please note that the consumer must be able to measure this volume accurately in the absence of a measuring device (e.g. 5 ml). Formula to obtain the final concentration of each medicinal ingredient (MI): Final concentration of the MI (%) = # of drops of the product * Volume of the MI per drop (ml) * 100/Final volume (ml) Note: Final volume (ml) = [# of drops of the product * Volume of the drop (ml)] + Volume of carrier oil (ml) Formula to obtain the final concentration of the finished product (maximum concentration of combined medicinal ingredient is 5%): Final concentration of the product (%) = # of drops of the product * Volume of all MI per the drop (ml) * 100/Final volume (ml) Notes: The volume of all medicinal ingredients (MI) per drop (ml) in the formula below = sum of the volumes of each medicinal ingredient per drop (ml) Final volume (ml) = [# of drops of the product * Volume of the drop (ml)] + Volume of carrier oil (ml) Bath Add 2 - 8 drops of undiluted product with the same amount of shampoo or liquid soap before adding it to the bath. Mix the water gently. For maximum benefit, remain in the bath for 10 minutes. Use 2 drops of undiluted product the first time and increase by 1 drop per bath up to a maximum of 8 drops. Use once daily (Tisserand 1977; Price and Price 2007). Compresses Add 2 drops of undiluted product to 500 ml of warm water in a bottle. Mix by shaking the bottle and immediately soak the compress. Squeeze lightly, apply the compress to the skin, and cover with clothes and/or towelling. Leave for 2 to 4 hours. Use 1 to 3 times per day (Tisserand 1977). Inhalation Handkerchief/tissue Apply 1 - 6 drops of undiluted product to a handkerchief/tissue and inhale occasionally. Use 1 to 3 times per day (Price and Price 2007). Steaming water/facial steamer Add 3 - 12 drops of undiluted product to a bowl of steaming water/facial steamer. Inhale slowly and deeply for 5 to 10 minutes. Use 1 to 3 times per day (Price and Price 1999; Tisserand and Balacs 1995).

NON-MEDICINAL INGREDIENTS

Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database. The addition of a non-medicinal ingredient with a preservative antioxidant purpose to the product formulation is recommended. Products supported by this monograph cannot include any essential oils as non-medicinal ingredients.

STORAGE CONDITION(S)

Must be established in accordance with the requirements described in the Natural Health Products Regulations. All products (information for industry; not for labelling) Child-resistant packaging/containers should be used (JC 2025). Store in airtight, light-resistant container at room temperature or in a refrigerator (Tisserand and Young 2014).

SPECIFICATIONS

The finished product specifications must be established in accordance with the requirements described in the Natural and Non-Prescription Health Products Directorate (NNHPD) Quality of Natural Health Products Guide. The medicinal ingredient must comply with the requirements outlined in the NHPID. Essential oils rich in linalool or limonene should only be used when the level of peroxides is kept to the lowest practical value. The addition of antioxidants at the time of production is recommended for these essential oils (Tisserand and Young 2014; IFRA 2004).

Common name(s)	Common name(s)	Source information	
Serial(s)	Part(s)		

amea	Balsam essential oilBalsam fir essential oil	Abies balsamea	NeedleTwig
a	Siberian fir essential oil	Abies sibirica	NeedleTwig
archangelica	Angelica essential oil	Angelica archangelica	RootSeed
odora	Rosewood essential oil	Aniba rosaeodora	Wood
peolens	Celery essential oilCelery seed essential oil	Apium graveolens	Seed
ereana	Frankincense essential oilOlibanum essential oil	Boswellia frereana	Stem resin
ereana	Frankincense absoluteOlibanum absolute	Boswellia frereana	Stem resin
acra	Frankincense essential oilOlibanum essential oil	Boswellia sacra	Stem resin
acra	Frankincense absoluteOlibanum absolute	Boswellia sacra	Stem resin
lorata	Cananga essential oilYlang ylang essential oil	Cananga odorata	Flower
	Caraway essential oil	Carum carvi	FruitSeed
antica	Atlas cedarwood essential oilCedarwood essential oil	Callunula atlantica	Wood
um nobile	English chamomile essential oilRoman chamomile essential oil	Chamaemelum nobile	Herb top flowering
on zizanioides	Vetiver essential oil	Chrysopogon zizanioides	Root
m camphora1	Camphor essential oilWhite camphor essential oil	Cinnamomum camphora	BranchStem BarkWood
m verum	Cinnamon essential oil	Cinnamomum verum	LeafTwig2
ifer	Labdanum essential oil	Cistus ladanifer	Gum
tiifolia	Lime essential oil	Citrus aurantiifolia	Unripe fruit peelRipe fruit peel
antium	Bitter orange essential oilNeroli essential oil	Citrus aurantium	Flower
antium	Bitter orange absoluteNeroli absolute	Citrus aurantium	Flower
antium	Petitgrain essential oilPetitgrain oil Paraguay	Citrus aurantium	Leaf
amia	Bergamot essential oil	Citrus bergamia	Fruit peel
amia	Bergamot (FCF) essential oil FCF = Furanocoumarins	Citrus bergamia	Fruit peel
lisi	Grapefruit essential oil	Citrus paradisi	Fruit peel
	Lemon essential oil	Citrus limon	Fruit peel
sis	Orange essential oilSweet orange essential oil	Citrus sinensis	Fruit peel
a myrrha	Myrrh essential oil	Commiphora myrrha	Sap resin
a myrrha	Myrrh absolute	Commiphora myrrha	Sap resin
triadora	Citron-scent gum essential oilLemon-scent gum essential oil	Corymbia alliodora	Leaf
cyminum	Cumin essential oil	Cuminum cyminum	Seed
sempervirens	Italian cypress essential oilMediterranean cypress essential oil	Cupressus sempervirens	NeedleTwig
on citratus	Lemongrass essential oil	Cymbopogon citratus	Leaf
on flexuosus	East Indian lemongrass essential oilMalabar lemongrass essential oil	Cymbopogon flexuosus	Herb top
on martini	Palmarosa essential oil	Cymbopogon martini	Herb top
on nardus	Ceylon citronella essential oilCitronella essential oil	Cymbopogon nardus	Leaf
on winterianus	Burma citronella essential oilJava citronella essential oil	Cymbopogon winterianus	Herb top
damomum	Cardamom essential oil	Elettaria cardamomum	Seed
globulus	Eucalyptus essential oil	Eucalyptus globulus	Leaf
polybractea	Blue mallee essential oil	Eucalyptus polybractea	Leaf

radiata	Narrow-leaf peppermint essential oil	Eucalyptus radiata	Leaf
vulgare subsp. vulgare var. vulgare	Bitter fennel essential oil	Foeniculum vulgare subsp. vulgare var. vulgare	Seed
vulgare subsp. vulgare var. dulce	Roman fennel essential oilSweet fennel essential oil	Foeniculum vulgare subsp. vulgare var. dulce	Seed
italicum	Curry plant essential oilImmortelle essential oil	Helichrysum italicum	Herb top flowering
m	Star anise essential oil	Illicium verum	Fruit
officinale	Jasmine absolute	Jasminum officinale	Flower
communis	Common juniper essential oilJuniper essential oil	Juniperus communis	Fruit
lis	Bay laurel essential oilLaurel essential oil	Laurus nobilis	LeafTwig
angustifolia	Lavender essential oil	Lavandula angustifolia	Herb top flowering
intermedia	Lavandin essential oil	Lavandula x intermedia	Herb top flowering
atifolia	Spike lavender essential oil	Lavandula latifolia	Herb top flowering
da	Litsea essential oil	Litsea cubeba	Fruit
chamomilla	Chamomile essential oilGerman chamomile essential oil	Matricaria chamomilla	Herb top flowering
alternifolia	Tea tree essential oil	Melaleuca alternifolia	LeafTwig leafy
cajuputi	Cajuput essential oil	Melaleuca cajuputi	Twig leafy
quinquenervia	Niaouli essential oil	Melaleuca quinquenervia	Leaf
inalis	Lemon balm essential oil	Melissa officinalis	Leaf
ensis	Cornmint essential oil	Mentha arvensis	LeafTwig flowering
piperita	Peppermint essential oil	Mentha x piperita	Herb floweringLeafTwig flowering
spicata	Spearmint essential oil	Mentha spicata	LeafTwig flowering
grans	Nutmeg essential oil	Myristica fragrans	Seed
communis	Myrtle essential oil	Myrtus communis	LeafTwig
basilicum3	Sweet basil essential oil	Ocimum basilicum	Herb top flowering
majorana	Sweet marjoram essential oilMarjoram essential oil	Origanum majorana	Herb top flowering
graveolens	Rose geranium essential oilGeranium essential oil	Pelargonium graveolens	LeafHerb top flowering
crispum	Parsley essential oil	Petroselinum crispum	Herb topSeed
stris	Scotch pine essential oil	Pinus sylvestris	Needle
a	Cubeb essential oil	Piper cubeba	Seed
n	Black pepper essential oil	Piper nigrum	Fruit
n cablin	Patchouli essential oil	Pogostemon cablin	Leaf
damascena	Damask rose essential oilRose essential oil	Rosa x damascena	Flower
centifolia	Provence rose essential oilRose essential oil	Rosa x centifolia	Flower
officinalis	Rosemary essential oil	Rosmarinus officinalis	Herb topTwig leafy flowering
lavandulifolia	Spanish sage essential oil	Salvia lavandulifolia	Herb top flowering
officinalis	Dalmatian sage essential oilSage essential oil	Salvia officinalis	Leaf
sclarea	Clary essential oilClary sage essential oil	Salvia sclarea	Herb top flowering
indrum	East Indian sandalwood essential oilSandalwood essential oil	Santalum album	Wood
hortensis	Savory essential oilSummer savory essential oil	Satureja hortensis	Herb top
benzoin	Benzoin essential oil	Styrax benzoin	Sap resin

romaticum	Clove essential oil	Syzygium aromaticum	Flower budLeafStem
garis	Thyme essential oil	Thymus vulgaris	Herb topHerb top flowering
is	White thyme essential oil	Thymus zygis	Herb top flowering
cinale	Ginger essential oil	Zingiber officinale	Rhizome

Medicinal Ingredients	Uses or Purposes
Abies balsamea	4, 5
Abies sibirica	4, 8
Angelica archangelica	4, 5, 6, 7, 8
Aniba rosaeodora	5, 6, 8
Apium graveolens	4, 5
Boswellia frereana(essential oil)	2, 5, 8
Boswellia frereana(absolute)	2, 5, 8
Boswellia sacra(essential oil)	2, 5, 8
Boswellia sacra(absolute)	2, 5, 8
Cananga odorata	5
Carum carvi	7, 8
Cedrus atlantica	1, 2, 4, 5, 8
Chamaemelum nobile	5, 7
Chrysopogon zizanioides	1, 4
Cinnamomum camphora	4, 8
Cinnamomum verum	4, 8
Cistus ladanifer	4, 5, 7
Citrus aurantiifolia	1, 4, 8
Citrus aurantium(Neroli - flower) (essential oil)	5, 6, 7, 8
Citrus aurantium(Neroli - flower) (absolute)	5, 6, 7, 8
Citrus aurantium(Petitgrain - leaf)	4, 5
Citrus bergamia(expressed)	6, 7, 8
Citrus bergamia(expressed - rectified) (FCF)	1, 2, 3, 6, 7, 8
Citrus paradisi	5
Citrus limon	8
Citrus sinensis	5, 7
Commiphora myrrha(essential oil)	2, 3, 8
Commiphora myrrha(absolute)	2, 3, 8
Corymbia citriodora	4, 6, 8
Cuminum cyminum	4, 5, 7
Cupressus sempervirens	4, 8
Cymbopogon citratus	4, 5, 6, 7

Cymbopogon flexuosus	4, 5, 6, 7
Cymbopogon martini	5, 8
Cymbopogon nardus	4, 6, 7
Cymbopogon winterianus	4, 6, 7
Elettaria cardamomum	7, 8
Eucalyptus globulus	4, 6, 8
Eucalyptus polybractea	4, 6, 8
Eucalyptus radiata	4, 6, 8
Foeniculum vulgare subsp. vulgare var. vulgare	2, 4, 7, 8
Foeniculum vulgare subsp. vulgare var. dulce	2, 4, 7, 8
Helichrysum italicum	1, 2, 3, 4, 5, 7, 8
Illicium verum	4, 5, 6, 7, 8
Jasminum officinale	4, 5, 6, 8
Juniperus communis	1, 2, 3, 4, 5
Laurus nobilis	4, 5, 6, 8
Lavandula angustifolia	4, 5, 6, 7, 8
Lavandula x intermedia	4, 5, 6, 7, 8
Lavandula latifolia	4, 5, 6, 7, 8
Litsea cubeba	7
Matricaria chamomilla	1, 2, 4, 5, 6, 7
Melaleuca alternifolia	8
Melaleuca cajuputi	1, 3, 4, 8
Melaleuca quinquenervia	8
Melissa officinalis	5, 7
Mentha arvensis	1, 4, 5, 7, 8
Mentha x piperita	4, 5, 7, 8
Mentha spicata	5, 6, 7, 8
Myristica fragrans	4, 5, 7
Myrtus communis	1, 8
Ocimum basilicum	5, 6, 7, 8
Origanum majorana	2, 3, 4, 5, 6, 7, 8
Pelargonium graveolens	8
Petroselinum crispum	2, 4, 5
Pinus sylvestris	4, 5, 8
Piper cubeba	2, 7, 8
Piper nigrum	4, 6, 7, 8
Pogostemon cablin	1, 2, 5, 7
Rosa x damascena	2, 5, 6, 8
Rosa x centifolia	2, 5, 6, 8

Rosmarinus officinalis	2, 4, 7, 8
Salvia lavandulifolia	2, 4, 5, 7, 8
Salvia officinalis	2, 4, 5, 7, 8
Salvia sclarea	4, 5, 6, 7, 8
Santalum album	5, 6, 7, 8
Satureja hortensis	4, 7, 8
Styrax benzoin	4, 5, 7, 8
Syzygium aromaticum	4, 8
Thymus vulgaris	1, 2, 4, 5, 8
Thymus zygis	1, 2, 4, 5, 8
Zingiber officinale	4, 7, 8

	Methods of Preparations	Concentrations for topical application	Concentrations for topical local application	Uses
	Oil, Essential (water steam distillation)	1 - 5%	1 - 10%	N/A
	Oil, Essential (water steam distillation)	1 - 2.5%	1 - 2.5%	N/A
	Oil, Essential (water steam distillation)	0.78%	0.78%	S, P
	Oil, Essential (water steam distillation)	1 - 5%	1 - 10%	S
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	S, P
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Absolute	1 - 3%	1 - 3%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Absolute	1 - 3%	1 - 3%	N/A
	Oil, Essential (water steam distillation)	0.8 - 2%	0.8 - 2%	S
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	P
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A
	Oil, Essential (water steam distillation)	1 - 1.5%	1 - 1.5%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 20%	S
	Oil, Essential (water steam distillation)	0.6 - 5%	0.6 - 5%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Oil, Essential (expressed)	Unripe fruit peel: 0.7%	Unripe fruit peel: 0.7%	P
ion)	Ripe fruit peel: 1 - 5%	Ripe fruit peel: 1 - 15%	N/A	
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	S, P
	Absolute	1 - 3%	1 - 3%	S, P
	Oil, Essential (water steam distillation)	1 - 5%	1 - 10%	S, P
	Oil, Essential (expressed)	0.4%	0.4%	S, P
	Oil, Essential (expressed - rectified)	1 - 5%	1 - 20%	P
	Oil, Essential (expressed)	1 - 4%	1 - 4%	P

	Oil, Essential (expressed)	1 - 2%	1 - 2%	S, P
ion)	1 - 5%	1 - 10%	N/A	
	Oil, Essential (expressed)	1 - 5%	1 - 10%	S, P
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Absolute	1 - 3%	1 - 3%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 20%	S
	Oil, Essential (water steam distillation)	0.4%	0.4%	P
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A
	Oil, Essential (water steam distillation)	0.7 - 4%	0.7 - 4%	S
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 6.5%	S
	Oil, Essential (water steam distillation)	1%	1%	S
	Oil, Essential (water steam distillation)	1%	1%	S
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 20%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 20%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 20%	S
e var. vulgare)	Oil, Essential (water steam distillation)	1 - 1.8%	1 - 1.8%	N/A
e var. dulce)	Oil, Essential (water steam distillation)	1 - 2.5%	1 - 2.5%	N/A
	Oil, Essential (water steam distillation)	0.5%	0.5%	N/A
	Oil, Essential (water steam distillation)	1 - 1.75%	1 - 1.75%	S
	Absolute	0.7%	0.7%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Oil, Essential (water steam distillation)	0.5%	0.5%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 15%	S, P
	Oil, Essential (water steam distillation)	1 - 5%	1 - 5%	S, P
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	S, P
	Oil, Essential (water steam distillation)	0.8%	0.8%	S
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A
	Oil, Essential (water steam distillation)	1%	1%	S
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 10%	S
	Oil, Essential (water steam distillation)	0.7%	0.7%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 5.4%	S
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	S
	Oil, Essential (water steam distillation)	0.8%	0.8%	N/A
	Oil, Essential (water steam distillation)	1 - 1.9%	1 - 1.9%	N/A
	Oil, Essential (water steam distillation)	1 - 3.3%	1 - 3.3%	S

	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 10%	S
	Oil, Essential (water steam distillation)	Herb top: 1 - 2%	Herb top: 1 - 2%	N/A
	Seed: 1 - 1.1%	N/A		
	Oil, Essential (water steam distillation)	1 - 5%	1 - 10%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 10%	N/A
	Oil, Essential (water steam distillation)	0.6%	0.6%	S
	Oil, Essential (water steam distillation)	1 - 2%	1 - 2%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 6.5%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 12.5%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	S
	Oil, Essential (water steam distillation)	1 - 5%	1 - 10%	S
	Oil, Essential (water steam distillation)	0.5 %	0.5 %	N/A
	Oil, Essential (water steam distillation)	1 - 2%	1 - 2%	
	Oil, Essential (water steam distillation)	Flower bud: 0.5 - 4%	Flower bud: 0.5 - 4%	S
	Leaf; Stem: 0.6 - 2%	S		
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Oil, Essential (water steam distillation)	1 - 5%	1 - 8%	N/A
	Oil, Essential (water steam distillation)	1 - 4%	1 - 4%	N/A

Medicinal Ingredients	Methods of Preparation ³	Concentration for single ingredient products
Any ingredient listed in Table 12	Absolute Oil, Essential (water steam distillation)	0.1 - 10% Oil, Essential (expressed) Oil, Essential (expressed)

Medicinal Ingredients	Methods of Preparations ²	Concentration for single ingredient products
Any ingredient listed in Table 11	Absolute Oil, Essential (water steam distillation)	0.1 - 10% Oil, Essential (expressed) Oil, Essential (expressed)

Medicinal Ingredients	Methods of Preparations ¹	Concentration for single ingredient products
Any ingredient listed in Table 1	Absolute Oil, Essential (water steam distillation)	0.1 - 10% Oil, Essential (expressed) Oil, Essential (expressed)

All products	Caution(s) and warning(s) For external use only. When using this product, avoid contact with eyes, nose, mouth, and mucous membranes.
Products for topical application (local application, massage, bath, or inhalation)	Caution(s) and warning(s) (except products that contain phototoxic ingredients)
Products intended to help relieve colds/coughs	Known adverse reaction(s) Stop use and ask a health care practitioner/health care provider for advice.