#### LabAroma.



Name	Latin Name	Origin	
Grapefruit	Citrus Paradisi	South Africa	
Material Type	Benchmark price per 15ml	Botanical Family	
Essential Oils	\$14		
Part of plant	Safety note	Conservation Status	
Fresh fruit rind	May cause skin irritation, especiall if the oil is older and oxidized. Use in low dilution when applying to th skin, such as in baths or massage oils. According to essential oil safe ty, by Robert Tisserand, grapefruit i phototoxic, and limit topical use to 4% when used in a blend (24 drops maximum per ounce). Skin irritation is generally a bigger concern than phototoxicity.	e Not listed with a conservation status. - s	
Profile	Therapeutic Properties		
• Monoterpene rich	and mood lighte • Refreshing, car caused by anxie • Useful for swol • Emotionally, is oil is often used gy. • Grapefruit esse	<ul> <li>Antimicrobial</li> <li>Antioxidants</li> <li>Antiviral</li> <li>Astringent</li> <li>Diuretic</li> <li>Tonic</li> <li>Said to be euphoric and slightly hypnotic, reviving, and mood lightening.</li> <li>Refreshing, can calm nerves and ease migraines caused by anxiety.</li> <li>Useful for swollen ankles and joints.</li> <li>Emotionally, is uplifting and cleansing. This essential oil is often used when looking to inspire positive ener-</li> </ul>	
Synergy	Energetics		

The interaction or cooperation of two or more sub-

stances to produce a combined effect greater than the

sum of their separate effects.

1st component synergy

d-Limonene (analgesic, antihypotensive, anti-inflammatory, antinociceptive, antiobesity, antioxidant, antitumoral, anxiolytic, hepatoprotective, immunostimulant, skin penetration enhancer, stimulant of autophagy, vasorelaxant).

1st essential oil synergy combinations bitter orange, lemon, lime, mandarin, sweet orange, yuzu .

2nd essential oil synergy combinations angelica root, bergamot, black pepper, caraway seed, combava peel, dwarf pine, elemi, juniperberry, neroli, palo santo, silver fir, spearmint.

#### 2nd component synergy

[-Myrcene, []-pinene, sabinene, nootkatone (analgesic, antibacterial, antidermatophytic, antifungal, antihypertensive, anti-inflammatory, antinociceptive, antiobesity, antioxidant, antiparasitic, antispasmodic, anxiolytic, insecticide, insect repellent).

1st essential oil synergy combinations hops, lemongrass, rosemary, white pine .

2nd essential oil synergy combinations cistus, fragonia, kanuka, myrtle, pomelo, yellow cedar

Potential psychological therapeutic solutions Depression, low mood: bergamot, black pepper, cistus, geranium, ginger, juniperberry, lemon, lime, neroli, pomelo, rosemary, sweet orange.

Potential psychological therapeutic solutions Activating, combat fatigue and lethargy, aid weight loss: black pepper, combava peel, combava petitgrain, dwarf pine, geranium, juniperberry, rose, rosemary, tarragon, yuzu

Digestive support: angelica root, black pepper, bitter orange, caraway seed, cardamom, coriander seed, ginger, lime, mandarin, patchouli, spearmint, sweet fennel

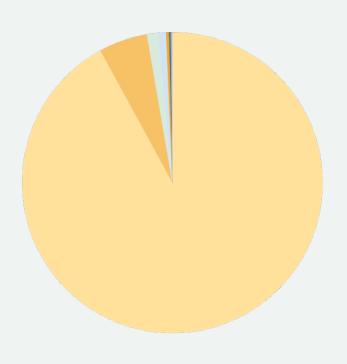
Musculoskeletal pain, inflammation, tension: basil, bergamot, black pepper, cistus, dwarf pine, ginger, hops, juniperberry, lavandin, lemongrass, plai, rosemary, silver fir, sweet fennel, white pine

References Rhind JP. (2019) Essential Oils 3rd Edition. London: Singing Dragon Tisserand R, Young R. (2014) Essential Oil Safety 2nd Edition. Edinburgh: Churchill Livingstone

Scent Notes	Psychological rankings		Physical rankings	
Тор	Energising	3	Digestive	2
			Respiratory	1

#### Ingredient notes

### LabAroma.



#### Chemical families

monoterpenes	89.55%
sesquiterpenes	5.09%
ketones	1.2%
aldehydes	0.79%
monoterpenols	0.31%
oxides	0.19%
esters	0.16%

### Complete chemical breakdown

### monoterpenes

d-limonene	86.92%	
b-myrcene	1.5%	
a-pinene	0.53%	
sabinene	0.31%	
b-phellandrene	0.18%	
b-pinene	0.11%	

### ketones

nootkatone	1.09%
carvone	0.11%

## sesquiterpenes

b-caryophyllene	4.13%	
valencene	0.35%	
a-humulene	0.3%	
d-cadinene	0.16%	
a-copanene	0.14%	
a-trans-bergamotene	0.01%	

# aldehydes

octanal	0.33%
decanal	0.29%
geranial	0.08%
nonanal	0.05%
dodecanal	0.04%

# monoterpenols

linalool	0.17%
trans-carveol	0.09%
cis-carveol	0.05%
esters	
geranyl acetate	0.11%
octyl acetate	0.05%

## oxides

limonene cis-1,2-epoxide	0.12%
limonene trans-1,2-epoxide	0.07%