

SAFE DILUTION GUIDELINES FOR POTENTIALLY PHOTOTOXIC ESSENTIAL OILS

Essential oil name and <i>Latin name</i>	Safe dilution level	Drops per 10 ml	Drops per Ounce
Angelica Root (<i>Angelica archangelica</i>)	0.8%	1.6	4.8
Bergamot (<i>Citrus bergamia. Citrus aurantium</i>)	0.4%	.8	2.4
Grapefruit (<i>Citrus x paradisi</i>)	4%	8	24
Lemon - cold pressed (<i>Citrus x limon, Citrus limonum</i>)	2%	4	12
Lime - cold pressed (<i>Citrus xaurantifolia, Citrus x latifolia</i>)	0.7%	1.4	4.2
Mandarin Leaf (<i>Citrus reticulata. Citrus nobilis</i>)	0.17%	3.4	1
Orange, Bitter (<i>Citrus x aurantium</i>)	1.25%	2.5	7.5
Rue (<i>Ruta graveoiens, Ruta montana</i>)	0.15%	.3	.9

Phototoxic essential oils contain furanocoumarins which absorb solar radiation and can lead to damaging skin reactions when skin is exposed to UV or sunlight. When using phototoxic essential oils above these safe dilution levels avoid skin exposure to sunlight for 12 to 18 hours. **Skin damaging reactions can occur up to 12 hours after application and can continue for up to 36 hours.** Reactions include sunburn, swelling, and sometimes blistering.

OR BE SAFE: use sun-safe versions of the above essential oils. The furanocoumarins are not volatile and do not pass into the distilled essential oil. Use steam distilled versions of lime, lemon, bergamot, and grapefruit for sun safety.

Cold pressed sweet orange, mandarin, and tangerine are safe and contain NO furanocoumarins.