

Need at least 10% lemon eucalyptus?

MADE:

Repel uses 30% lemon eucalyptus?

can change total volume and units volume in each column--unit volume will be either 2.5 or 6 ml

29.5625

after mixing--adjust w apple cider vinegar or bicarb to bring pH to ~ 6.5

	given	units	1 multiplier				0.5 multiplier		2 multiplier		4 multiplier		
	calc		1	2	3	4	1units	4units	8units	16units	32units		
UNIT VOLUME	given	oz	2.0	4.0	6.0	8.0	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier		
	conv^	ml	60	120	180	240	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier		
Serving Size	given	ml	10.0	20.0	30.0	40.0	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier		
Servings/Unit	calc		6	3	2	1.5	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier	same as 1 multiplier		
FINAL TOTAL VOLUME	given	oz	4 oz	8 oz	12 oz	16 oz	2 oz	8 oz	16 oz	32 oz	64 oz		
TO CAL CONC	conv^	ml	120	240	360	480	60 ml	240 ml	480 ml	960 ml	1920 ml		
	conv^	gal	0.03	0.06	0.09	0.12	0.02 gal	0.06 gal	0.12 gal	0.24 gal	0.48 gal		
FINAL pH													
H2O2 35%	calc	ml	0.00	0.00	0.00	0.00	0.00 ml	0.00 ml	0.00 ml	0.00 ml	0.00 ml		
+ water	conv^	oz	0.00	0.00	0.00	0.00	0.00 ml	0.00 oz	0.00 oz	0.00 oz	0.00 oz		
OR H2O2 3%	3%	ml	0.00	0.0000%	0	0	0 ml	0 ml	0 oz	0 ml	0 oz		
TOTAL W DILUTANT	calc	oz	4oz				2 oz	8 oz	16 oz	32 oz	64 oz		
	calc	ml	118.25										
+ H2O dilutant	calc	oz	2.00473	oz			1.0024 oz	4.01 oz	8.0189 oz	16.0378 oz	32.0756 oz		
	conv^	ml		ml			0 ml	0 ml	0 ml	0 ml	0 ml		
TOTAL (USE IF CONCENT	given	oz	1.99527				0.9976 oz	3.99 oz	7.9811 oz	15.9622 oz	31.9244 oz		
	calc	oz	0.00				concentration	oil	0.00 oz	0.00 oz	0.00 oz		
CONCENTRATE H2O*	conv	ml	0				only	0 ml	0 ml	0 ml	0 ml		
LIQUID CONCENTRATE		oz	1.99527	983.33									
INCLUDING OILS		ml	59	drp/100ml	ppm	59.00	29.5 ml	0.9976 oz	118 ml	3.9 oz	236 ml	7.867 oz	
Apple Cider Vinegar	100%	ml	0.5	0.4167%	4,167	0.50	0.85%	0.25 ml	0.0125 ml	1 ml	0 oz	2 ml	0.067 oz
Glycerine	100%	ml	2.5	2.0833%	20,833	2.50	4.24%	1.25 ml		5 ml	0.2 oz	10 ml	0.333 oz
Honey	2%	ml	0.5	0.0083%	83	0.50	0.85%	0.00		0.00		0.00	
Iodine*	50%	ml	2	0.8333%	8,333	2.00	3.39%	1 ml	0.0333 ml	4 ml	0.1 oz	8 ml	0.267 oz
Isopropyl Alcohol	95%	ml	1	0.7917%	7,917	1.00	1.69%	0.5 ml	0.0167 ml	2 ml	0.1 oz	4 ml	0.133 oz
Ethanol	83%	ml	2	1.3833%	13,833	2.00	3.39%	1 ml	0.0333 ml	4 ml	0.1 oz	8 ml	0.267 oz
Witch Hazel, 17% Etoh	100%	ml											
Vanillin	100%	ml											
Castor Oil	100%	ml	3	2.5000%	25,000	3.00	5.08%	1.5 ml	0.075 ml	6 ml	0.2 oz	12 ml	0.4 oz
Coconut Oil	100%	ml	3	2.5000%	25,000	3.00	5.08%	1.5 ml	0.075 ml	6 ml	0.2 oz	12 ml	0.4 oz
Neem Oil	100%	ml	3	2.5000%	25,000	3.00	5.08%	1.5 ml	0.075 ml	6 ml	0.2 oz	12 ml	0.4 oz
Olive Oil	100%	ml	3	2.5000%	25,000	3.00	5.08%	1.5 ml	0.075 ml	6 ml	0.2	12 ml	0.4
Sesame Oil Raw Organic	100%	ml											
	conv	ml	38.5	drp/100ml		38.50	65.25%	19.25 ml		77 ml	2.6 oz	154 ml	5.133 oz
	wo Lemon Eu	ml	14.5	641.66667									
Oils TOTAL	calc	drop	770	32.0833%	320,833			385 drop		1540 drop		3080 drop	
Camphor	100%	drop											
Cedar Atlas	100%	drop	10	0.4167%	4,167	0.50	0.85%	5 drop	0.25 ml	20 drop	1 ml	40 drop	2 ml
Cinnamon	100%	drop	20	0.8333%	8,333	1.00	1.69%	10 drop	0.5 ml	40 drop	2 ml	80 drop	4 ml
Citronella	100%	drop	80	3.3333%	33,333	4.00	6.78%	40 drop	2 ml	160 drop	8 ml	320 drop	16 ml
Clove	100%	drop	10	0.4167%	4,167	0.50	0.85%	5 drop	0.25 ml	20 drop	1 ml	40 drop	2 ml
Clary Sage	100%	drop											
Eucalyptus, Regular	100%	drop											
Eucalyptus, Lemon	100%	drop	480	20.0000%	200,000	24.00	40.68%	240 drop	12 ml	960 drop	48 ml	1920 drop	96 ml
Frankencense	100%	drop											
Geranium	100%	drop	30	1.2500%	12,500	1.50	2.54%	15 drop	0.75 ml	60 drop	3 ml	120 drop	6 ml
Lavendar	100%	drop	10	0.4167%	4,167	0.50	0.85%	5 drop	0.25 ml	20 drop	1 ml	40 drop	2 ml
Lemon	100%	drop											
Lemongrass	100%	drop	80	3.3333%	33,333	4.00	6.78%	40	2 ml	160 drop	8 ml	320 drop	16 ml
Orange	100%	drop											
Oregano	100%	drop											
Peppermint	100%	drop	10	0.4167%	4,167	0.50	0.85%	5	0.25 ml	20 drop	1 ml	40 drop	2 ml
Pine	100%	drop											
Rosemary	100%	drop	30	1.2500%	12,500	1.50	2.54%						
Sage	100%	drop											
Spearmint	100%	drop											
Tea Tree	100%	drop	5	0.2083%	2,083	0.25	0.42%	2.5	0.125 ml	10 drop	0.5 ml	20 drop	1 ml
Thyme	100%	drop	5	0.2083%	2,083	0.25	0.42%	2.5	0.125 ml	10 drop	0.5 ml	20 drop	1 ml
Wintergreen	100%	drop											
Ylang Ylang													

NOTES: Boric Acid, 1.74% = 6 mg B/mL (max 4.7% at 20C/68F); Borax 2.65% = 3 mg/mL (max 4.7% at 20C/68F)  
1/4 cup in 1 gallon = 2 oz in 128 oz = 1.55%; 1/2 cup in 4 cups water is 4 oz in 32 or 12.5% (only at >105F)

\*Iodine 12-25 ppm is antiseptic, 100-500 is cidal

**Directions**

1 Trial without dilution for effect

2 Trial with dilution, 1 oz to 3 oz water

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