

# Esters

## CHEMICAL FAMILY

Esters are very common and are found in a large number of essential oils. They are antispasmodic, anti-inflammatory, anti-fungal, calming, and relaxing. Esters have an oxygen double bonded to a carbon that is bonded to another oxygen. Esters are calming and soothing. Their aromas tend to be floral and fruity. They tend to be middle notes, some closer to the top than others.

THERAPEUTIC PROPERTIES		
ADAPTOGENIC	ANALGESIC	ANTI-FUNGAL
ANTI-INFLAMMATORY	ANTIMICROBIAL	ANTISPASMODIC
DIGESTIVE AID	EMOTIONAL UPLIFTING	SEDATIVE
SOOTHING	REGULATE CNS	

## COMMON ESTERS CHEMICALS

### MOLECULAR STRUCTURES

linalyl acetate	citronellyl acetate	neryl acetate
benzyl benzoate	geranyl acetate	lavandulyl acetate
bornyl acetate	fenchyl acetate	alpha-terpinyl acetate
menthyl butyrate	methyl salicylate	eugenol acetate
isobutyl angelate	methyl N-methyl anthranilate	

**ESSENTIAL OILS CONTENT OF ESTERS  
ESTERS % CONTENTS**

<b>Essential Oils</b>	<b>Percentage</b>
Wintergreen	97%
Birch	90%
Onycha	70%
Roman Chamomile	65%
Clary Sage	64%
Petitgrain	57%
Cardamom	50%
Lavandin	44%
Helichrysum	43%
Jasmine	43%
Valerine	42%
Lavender	39%
Bergamot	37%
Spruce	34%
Tsuga	33%
Geranium	23%
Palmarosa	21%
Neroli	19%
Balsam Fir	16%
Juniper Berry	16%

**ESSENTIAL OILS CONTENT OF ESTERS  
ESTERS % CONTENT CONT.**

<b>Essential Oils</b>	<b>Percentage</b>
Myrtle	15%
Douglas Fir	14%
Bay Laurel	13%
Celery Seed	13%
White Fir	13%
Clove Bud	12%
Lemongrass	10%
Rosemary Verbenon	9%
Cistus	8%
Lemon Eucalyptus	8%
Thuja	8%
Peppermint	7%
Silver Fir	7%
Cypress	6%
Marjoram	6%
Melissa	6%
Bitter Orange	5%
Coriander	5%
Garden Thyme	5%
Spanish Marjoram	5%

ESSENTIAL OILS CONTENT OF ESTERS  
ESTERS % CONTENT CONT.

Essential Oils	Percentage
Basil	4%
Cassia	4%
Fleabane	4%
Ormenis	4%
Rose	4%
Angelica Root	3%
Carrot Seed	3%
Goldenrod	3%
Lemon	3%
Winter Savory	3%
Sage	3%
Spearmint	3%
Galbanum	2%
Hyssop	2%
Mandarin	2%
Orange	2%
Pine	2%
Ravensara	2%
Yarrow	2%
Cajeput	2%

ESSENTIAL OILS CONTENT OF ESTERS  
ESTERS % CONTENT CONT.

Essential Oils	Percentage
Cedar Leaf	1%
Eucalyptus	1%
Wild Tansy	1%
Ledum	1%
Rosemary	1%
German Chamomile	1%
Vitex	1%