

## **AWE cosmeceuticals - Ingredients**

### **AC.Net™**

Ac.net™ is a combination of Nordihydroguaiaretic acid (NDGA) and Oleanolic acid in an osmotic gel.

NDGA is derived from the Creosote bush (*Larrea tridentate*). It is proven to have potent anti-oxidant capabilities and has been used by Native Americans for its curative abilities.

Oleanolic acid is a Pentacyclic Triterpene (PCTs) found in a number of plants and is chiefly known for its anti-inflammatory characteristics. Oleanolic acid is also present in a range of Ayurvedic herbs including Holy Basil (*Ocimum Sanctum*) which has reported anti-oxidant, anti-microbial and anti-viral properties.

Ac.net is a trademark owned by Sederma

### **Arginine**

Arginine is an amino acid with antioxidant and wound healing properties. Arginine helps with collagen production and hydration.

### **Avocado oil (*Persea gratissima*)**

Taken from the fruit, avocado oil contains vitamins, proteins, lecithin and fatty acids; it is especially beneficial for dry and dehydrated skin.

### **Apricot kernel oil**

Derived from the kernel of apricots, this oil is rich in essential fatty acids, omega 6, omega 9, antioxidants and vitamins. It is beneficial for all skin types, especially dry skin.

### **Azelaic acid**

Naturally found in wheat, rye and barley, Azelaic acid is known primarily for its anti-inflammatory and keratolytic actions. It is an effective treatment used for rosacea, acne and skin lightening.

### **Basil essential oil (*Ocimum basilicum*)**

Basil is used extensively in Ayurvedic medicine. The oil harvested from the plant is beneficial for acne prone areas and is refreshing on damaged skin.

### **Bergamot essential oil (Berpeptene free)**

The removal of Berpeptene ensures this oil is non-phototoxic. The subsequent safe derivative is widely used in perfumery and is of benefit for oily skin and irritated skin conditions such as eczema and psoriasis.

### **Beta glucan**

Beta glucan is a natural compound derived from a variety of plants including yeast, oats, barley and rye. Beta glucan has a small molecular structure making it easily absorbed into the skin, from there it activates the skin's own immune cells, Langerhan's cells. The immune cells are vital for wound healing, including treatment after stressors such as sun exposure to maintain cell function and to help fight off bacteria. Beta glucan assists with the promotion of healthy skin and collagen production

### **Bisabolol**

Widely known for its anti-inflammatory, anti-irritant and anti-microbial properties Bisabolol is the principle constituent of German Chamomile.

### **Boswellia Seratta**

Boswellia Seratta is more commonly known as Indian Frankincense. It is used to treat a variety of conditions in Ayurvedic medicine; however it is most widely known for its well documented anti-inflammatory effect.

### **Butyrospermum parkii (karate) seed butter**

Shea butter is a natural fat derived from the seeds of the African Karate tree. It contains five principal fatty acids. This ingredient is widely used in cosmetics for its hydrating properties, its ability to improve skin suppleness and help alleviate dry skin conditions.

### **Camelia sinensis (Green tea) extract**

Green tea's medicinal properties are attributed to polyphenols, those found in green teas are called catechins. Green tea quenches free radicals and has shown protection from UV damage. Preliminary studies also show that green tea may inhibit metalloproteinases (MMP).

### **Caprylic/Capric Triglycerides**

Derived from coconut oil, this is a combination of Caprylic and Capric acids. It is widely used in health care products as a natural skin conditioning agent.

## **Carnosine**

A naturally occurring amino acid which protects the skin from glycation and oxidation, both of which contribute the cross linking of proteins. Ageing and sun exposure increases cross linking of collagen fibres, which produces visible skin ageing in the form of wrinkling and loss of skin tone. Carnosine has proven to help rejuvenate ageing skin cells.

## **Centella Asiatica (Gotu kola)**

The Sanskrit name for Centella Asiatica is Brahmi, meaning 'consciousness' or 'wisdom', This essential herb is often used to improve concentration and aid in retention of information. It has long been used in Ayurvedic and Chinese medicines for its ability to promote longevity and for its wound healing benefits.

## **Century extract (Centaurium erythrea)**

This herb has been used throughout the centuries for numerous ailments. It is used for its anti inflammatory properties and protection of hyaluronic acid and elastin.

## **Cetearyl Olivat**

A safe and gentle emulsifier, derived from olive oil.

## **Cholecalciferol (Vitamin D3)**

The application of this vitamin topically has proven to be effective in alleviating symptoms of eczema and psoriasis. It is well known for its anti inflammatory properties.

## **Citrus aurantium (Neroli)**

Neroli oil is obtained by water distillation of the blossoms from the bitter orange tree (C. aurantium). It is non toxic, non irritant, non sensitizing and non photo toxic. Neroli is beneficial for sensitive, dry and mature skin conditions. It has a soft, feminine fragrance, making it one of the most widely used in the perfume industry.

## **Co-enzyme Q10**

A vitamin-like substance synthesized by the body. It is vital in cellular energy and acts as an antioxidant. As we age the amount of Co-enzyme Q10 decreases within cells.

## **Colloidal oat flour**

Derived from the oat kernel, this ingredient is used for its anti inflammatory, antioxidant and protective properties.

### **Cranberry extract**

With high concentrations of vitamin C, B3 and B5 cranberry extract is an excellent antioxidant and promotes cellular turnover. It protects skin from environmental damage, helps even skin tone and is beneficial for all skin types.

### **Embilica Officianalis (Indian gooseberry)**

Known in Ayurveda as 'Amalaki', it is considered the ultimate herb for rejuvenation and the reversal of the ageing process. It is a powerful anti-oxidant and contains the highest natural source of vitamin C. The vitamin C content in Amalaki provides 45-70% of the antioxidant ability.

### **Ethanol**

Produced by the fermentation of sugars and yeast, ethanol is pure alcohol. It is a solvent acting as a penetration enhancer for active ingredients. When the correct skin conditioning agents are present in a product, the ethanol content will evaporate from the surface of the skin and not cause drying.

### **Eucalyptus essential oil (Eucalyptus globulus)**

The oil is taken from the leaves and twigs of eucalyptus trees. It has many properties including anti-inflammatory, anti-bacterial and is purported to aid in wound healing.

### **Evening primrose oil (Oenothera biennis)**

The oil is extracted from the seed of evening primrose plant. It contains gamma linolenic acid, vitamins and minerals. The oil is excellent in the prevention of premature ageing of the skin and it is also beneficial in the treatment of eczema and psoriasis.

### **Geranium Bourbon essential oil (Pelargonium graveolens)**

Derived from the flowers and leaves, this oil is used extensively for its pleasant aroma and is non-toxic, non-irritant and non-sensitising.

### **Ginger essential oil (Zingiber officinalis)**

Ginger is widely known as having an extensive range of benefits and is used extensively in Ayurvedic and Chinese medicines. In skin care treatments it is non-irritating and improves circulation.

### **Ginkgo biloba**

Ginkgo biloba is widely used in Asian medicine for its diverse properties which include, improvement in circulation, neutralising free radicals and protection of cell membranes.

### **Gluconic acid**

Naturally occurring in cells, gluconic acid is a Polyhydroxy acid PHA, which has proven benefits in skincare. It acts as a humectants and is also beneficial for evening skin tone.

### **Grape seed oil (*Vitis Vinefera*)**

This oil is very high in linoleic acid. It is useful as a mild astringent and for skin toning.

### **Guar gum**

The gum is derived from the legume plant, *Cyamopsis tetragonolobus*. It is used as a thickening agent in health care preparations.

### **Hyaluronic acid**

Naturally found in epithelial (surface), connective and neural tissues of the body. Hyaluronic acid is a glycosaminoglycan and important in cell renewal. It is a humectant, which means it attracts water, hence its use in skin care formulations and in injectable fillers such as Restylane®.

### **Juniper essential oil (*Juniperus communis*)**

The oil can be extracted from the berries, needles and twigs of the juniper tree. It is well known for its antiseptic and astringent properties. Be in AWE™ uses oil purely extracted from the berries of the plant only.

### **Lactic acid**

A fermentation product of lactose, it is a naturally occurring organic acid which is classified as a alpha hydroxyl acid (AHA). Lactic acid is well known for its hydrating properties as well as its ability to act as a mild non irritating exfoliant.

### **Lavender essential oil (*Lavendula angustifolia*)**

Lavender is a widely used essential oil, known for its anti-inflammatory properties and pleasant scent. It is suitable for all skin types.

### **Lemon essential oil (*Citrus limonum* essential oil)**

The oil is extracted from the rind of the fruit. Lemon is used for its antiseptic and bactericidal properties, as well as its naturally refreshing scent.

### **Lemon myrtle essential oil (*Backhousia citriodora*)**

This oil comes from a native Australian tree and possesses anti-fungal and anti-

microbial properties. It is used extensively in beauty products for its fresh uplifting aroma.

### **Lime essential oil (*Citrus aurantifolia*)**

The oil is extracted from the rind of the fruit and is often used for its citrus fragrance. The oil also has high vitamin C content and is known for its anti-irritant, anti-microbial and decongesting properties.

### **Linoleic and Linolenic acids**

Essential fatty acids such as linoleic and linolenic acid can only be provided through diet and are essential for several functions, including wound healing and reducing inflammation. Both are abundant in a variety of vegetable oils.

### **Liquorice extract (*Glycyrrhiza glabra*)**

Liquorice has a long history of use in Ayurvedic and Chinese medicines to treat a variety of ailments, including inflammation as it has a natural steroid content. Liquorice contains glycyrrhizin, which has become a popular inclusion in skin care products due to its ability to act on melanin and reduce the appearance of skin pigmentation. It is also a potent anti-oxidant.

### **May chang essential oil (*Litsea cubeba*)**

Known as the Chinese equivalent to lemon grass this more subtle oil is derived from the plant *Litsea cubeba* and has a pleasant oriental scent. Along with its fragrance it is used for its anti-inflammatory and anti-microbial properties.

### **Niacinamide (Vitamin B3)**

Niacinamide has become a very popular skin care ingredient most notably in whitening, anti-ageing and anti-acne products. It is proven to aid the repair of DNA by increasing cell energy.

### **Nordihydroguaiaretic acid (NDGA)**

See AC.Net™

### **Oleanolic acid**

See AC.Net™

### **Olive oil (*Olea europea*)**

High in alpha linolenic acid, this oil is excellent for dry, mature and irritated skins.

### **Phragmites kharka extract**

Phragmites kharka is a grass reed grown in many aquatic areas all over the world. It has been used by a number of traditional medicines for a variety of ailments. Phragmites was used for the treatment of skin conditions by the Navajo Indians of North America. It is combined with Poria cocos extract under the trade name Syri calm™.

Syri calm is a trademark owned by CLR (Chemisches Laboratorium, Berlin)

### **Phyto Cell Tec™ (Malus domestica extract)**

A patent pending liposomal preparation using plant cell culture technology. Cultured stem cells from a rare Swiss apple, Uttwiler Spätlauber have been studied and used in this preparation. It protects the longevity of skin stem cells and vitality of the skin.

### **Poria cocos extract**

A fungi used extensively in Chinese medicine. Poria cocos is known for its anti-inflammatory properties.

### **ProVitamin B5 (Panthenol)**

Panthenol is a humectant, meaning it binds water to it, therefore providing hydration to the skin. It also has shown wound healing properties, improves skin barrier function and helps soothe skin.

### **Resveratrol**

A naturally occurring molecule found in the skin of red wine grapes, it is also present in some berries and parts of the peanut plant. It has proven to have exceptionally high antioxidant benefits, which exceed those of vitamins A, C and E.

### **Retinol**

A pure form of vitamin A encapsulated in a liposome to ensure effective delivery and no irritation. Retinol is converted into retinoic acid by metabolic processes in the skin.

Not all retinol will be converted into retinoic acid, and in the case of retinyl palmitate, even less is converted. For this reason excessively high amounts of retinol are not only wasted but also known to cause harmful skin irritation. This in turn creates an inflammatory response, resulting in the unwanted formation of free radicals.

Retinoic acid is essential to skin health. The benefits of topical application in skin care have been studied with excellent results, especially in ageing skins.

## **Revidrate™**

Myristyl Phosphomalate, a phosphorylated complex lipid, in an oil soluble excipient. Revidrate acts by promoting the skin's own natural moisturising components.

Revidrate™ is a trademark owned by Sederma

## **Rose hip oil (Rosa carina)**

Used in many anti-ageing formulations, rose hip oil has become very popular for its wrinkle reducing properties. It has high concentrations of essential fatty acids, linoleic and linolenic acid.

## **Rosemary essential oil (Rosmarinus officianalis)**

The oil is extracted from the fresh flowering tops of the rosemary plant. It has many therapeutic uses for the skin, mainly decongesting, and is suitable for irritated skin conditions such as eczema.

## **Salix alba (Willowherb) extract**

The bark from this willow tree contains salicin; salicylic acid and aspirin are derived from salicin. It has been used in medicine for aches, pains and fever. In skincare it provides anti-inflammatory and antioxidant benefits. It is also ideal for calming irritated and itchy skin.

## **Sodium Lactate**

Sodium salt derived from lactic acid is used to buffer the pH of a product.

## **Sorbitan olivate & Cetearyl Oliviate (Olivem 900)**

A natural emulsifying agent derived from olive oil.

## **Sodium Cocoamphoacetate**

A mild surfactant derived from coconut oil. It aids in foaming ability and cleaning by allowing water to mix with oil and dirt. It is non-irritating and suitable for sensitive skins.

## **Sodium cocoyl glutamate**

Naturally occurring surfactant, mild and non-irritating.

## **Sodium lauryl glucose carboxylate**

Foaming agent and mild surfactant derived from coconut and corn.



### **Sodium PCA**

A naturally occurring humectant found in the skin; it is derived from amino acids and is used for its moisture binding properties.

### **SYN®-AKE (Dipeptide diaminobutyroyl benzylamide diacetate)**

A tri-peptide developed to mimic the action of the venom from the temple viper snake. The peptide works in a manner similar to Waglerin 1, a neuromuscular blocking compound. In vivo trials have shown excellent smoothing and anti-wrinkle properties, after 1 month. Used in Anti-ageing serum at 3%.

### **Sunflower oil (Helianthus annuus)**

Extracted from the seeds of the sunflower, the oil is widely used as an emollient in cosmetics. It is high in linoleic acid, as well as lecithin, carotenoids and tocopherols (vitamin E).

### **Sweet Orange essential oil (citrus sinensis)**

Extracted from the orange rind, this oil is primarily used for its beautiful fragrance. It has anti-inflammatory and antiseptic properties. It is non-toxic, non-irritant and non-sensitising.

### **Theobroma cacao (cocoa) seed butter**

A natural vegetable fat obtained from cacao beans. It has natural antioxidant properties and is widely used in cosmetics for its emollient function and faint, pleasant fragrance. It is beneficial for dry skin and is often recommended for prevention of stretch marks in pregnancy.

### **Tocopherols (natural vitamin E)**

Alpha tocopherol is the main component of vitamin E (D tocopherol). It is an excellent anti-oxidant, however tocotrienols (alpha, beta, gamma and delta) have far superior anti-oxidant qualities. Mixed tocopherols are the combination of D tocopherol and the four tocotrienols.

Synthetic vitamin E, usually a combination of dl Alpha tocopherol acetate does not contain the anti-oxidant potential of the natural form.

### **Trehalose & hydrolysed vegetable protein**

Trehalose is a disaccharide and combined with natural vegetable protein, it stimulates the skin's own natural moisturising factor (NMF). It is used for its ability to maintain balance of hydration in fluctuating climatic conditions.

### **Ursolic acid**

This acid can be found in many plants and fruits but is commonly obtained from Holy basil (Tulsi), Thyme and Lavender. It has proven anti-inflammatory, anti-microbial, and anti-tumour properties.

### **Vanilla plantifolia (vanilla) oleo resin**

Native to Mexico, the most common form of vanilla is *v.plantifolia*, which is now cultivated in many tropical areas. Madagascar is the largest producer of vanilla. The vanilla beans are highly regarded for their flavour; it is the second most expensive spice in the world, after saffron.

### **Wheatgerm oil (*Tritium vulgare*)**

This oil is obtained from the germ of the wheat kernel. This oil has excellent properties for dry, ageing and irritated skin. It is high in protein, lecithin and vitamins A, D and E,

### **β White™ (Oligopeptide-68)**

A biomimetic peptide derived from TGF-β, encapsulated in a liposome. Unlike other common whitening agents, it inhibits the action of the MITF cellular pathway to decrease constitutive and facultative pigmentation. It has an excellent safety record as is non-irritating.

### **Ylang Ylang essential oil (*Cananga odorata* var. *Genuine*)**

The oil is extracted from the yellow flowers of this tall tropical tree. It has long been used for a variety of skin conditions and is widely used in perfumery. It is anti-irritant and non-toxic.