



COSMECEUTICAL LINE

Ingredients Information



SKIN REGENERATION

IRIS FLORENTINA ROOT EXTRACT

Iris florentina extract is a hydroglycolic extract of iris florentina roots. The extract is rich in isoflavones and has a oestrogen-like activity. It helps to fight against wrinkle formation, dryness and skin slackening.

Description:

Iris is a genus of between 200–300 species of flowering plants with showy flowers. It takes its name from the Greek word for a rainbow, referring to the wide variety of flower colours found among the many species. Iris florentina has large white flowers tinged with pale lavender and a bright yellow beard on the falls. Less commonly, a purple form occurs, of smaller growth.



Iris florentina

Constituents of Iris florentina root extract:

Iris florentina roots are rich in isoflavones.

Properties of Iris florentina root extract :

Iris florentina root extract inhibits the activity of enzymes causing the breakdown of proteins in the extracellular matrix (collagen and elastin) and favours the synthesis of DEJ (dermal-epidermal junction) anchor proteins. It reinforces the skin barrier and decreases the depth of wrinkles. The skin appears more hydrated and less wrinkled.

Cosmetic applications:

Iris florentina root extract can be incorporated in all anti-stress and anti-age formulations, in particular for the care of mature skin.

TRIFOLIUM PRATENSE (CLOVER) FLOWER EXTRACT

Trifolium pratense extract is an hydroglycolic extract of red clover flowers rich in isoflavones. Isoflavones are non-steroidal hormones. The extract is intended for the treatment of mature skin characterized by dryness, loss of tone and decreased thickness.

Description:

***Trifolium pratense* (Red Clover)** is a species of clover, native to Europe, western Asia and northwest Africa, but planted and naturalised in many other regions. It is an herbaceous, short lived perennial plant, variable in size, growing to 20-80 cm tall. The leaves are alternate, trifoliate (with three leaflets), each leaflet 15-30 mm long and 8-15 mm broad, green with a characteristic pale crescent in the outer half of the leaf; the petiole is 1-4 cm long, with two basal stipules. The flowers are dark pink with a paler base, 12-15 mm long, produced in a dense inflorescence.



Trifolium pratense

Constituents of *Trifolium pratense* flower extract :

Trifolium pratense flower extract is rich in isoflavones.

Properties of *Trifolium pratense* flower extract :

Anti-wrinkle effect. Improvement of the thickness of the skin. Skin moisturizing.

Cosmetic applications:

Anti-ageing creams for mature skin.

SOY ISOFLAVONE

Some of Janssen Cosmetics Skin Regeneration products contain pure isoflavone aglycones from soy with a high concentration of pure Genistein. Isoflavones are known as phytoestrogens that exert a slight estrogenic effect in humans. The isoflavone Genistein is a protein tyrosine kinase inhibitor. Both, the estrogenic effect and the inhibition of kinases might positively influence skin collagen content and so skin aging. In adipose tissue Genistein produces a lipolytic activity. It has therefore a potential in the treatment of cellulite.

Description:

The soybean (*Glycine max*) is a species of legume native to East Asia. The plant is classed as an oilseed rather than a pulse. It is an annual plant that has been used in China for 5,000 years as a food and a component of drugs. Soy contains significant amounts of all the essential amino acids for humans, and so is a good source of protein.



Glycine Soya

Properties of Soy Isoflavones:

Stimulation of collagen production, Stimulation of elastin production
Inhibition of matrix metalloproteinases.

Cosmetic applications:

Anti-aging cosmetics, anti cellulite.

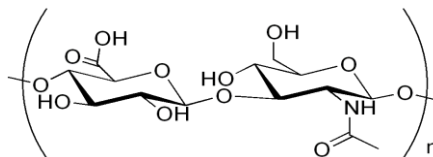
HYALURONIC ACID

Hyaluronic acid is a non-sulfated glycosaminoglycan distributed widely throughout connective, epithelial, and neural tissues. It is one of the chief components of the extracellular matrix and binds water very strongly. In living tissue it serves as a water reservoir. Hyaluronic acid has a standard molecular weight between $1.5-1.8 \times 10^6$ Dalton. It is a very powerful hydration and film forming agent. Low molecular weight sodium salt of hyaluronic acid has a molecular weight below 1.0×10^6 Dalton. Due to its structure and lower molecular weight it is able to penetrate into the skin together with water and also with other substances attached. Low molecular weight hyaluronic acid can serve as an inner moisturizing agent or as a carrier of biological active substances.

Description:

The chemical structure of hyaluronan was determined in the 1950s in the laboratory of Karl Meyer. Hyaluronan is a polymer of disaccharides, themselves composed of D-glucuronic acid and D-N-acetylglucosamine, linked together via alternating β -1,4 and β -1,3 glycosidic bonds.

Chemical structure:



Other names:

Sodium hyaluronate, hyaluronan.

Source:

Hyaluronic acid is produced by fermentation.

Cosmetic applications:

Hyaluronic acid is a common ingredient in skin care products. It is a very effective moisturizer and film forming agent. Hyaluronic acid and its sodium salt are recommended in all cosmetic formulations where skin hydration is needed: daily skin care, night and regenerating preparations, after sun, decorative cosmetics, pre shaves, after shaves, hair care products.

HYDROLYZED LUPIN PROTEIN

Hydrolyzed lupin protein is an active ingredient, obtained from sweet white lupin. It is rich in low molecular weight glutaminated peptides and in oligosaccharides. Hydrolyzed lupin protein favors the synthesis of epidermal proteins and lipids and improves the barrier function of the skin.

Description:

Lupinus albus, commonly known as the white lupin, is a member of the genus *Lupinus* in the family Fabaceae. It is a traditional pulse cultivated in the Mediterranean region. The white lupin is annual, more or less pubescent plant, 30 - 120 cm high. It occurs in meadows, pastures, and grassy slopes, predominantly on sandy and acid soils.



Lupinus albus

Constituents of hydrolyzed lupin protein:

Hydrolyzed lupin protein is rich in glutaminated peptides and oligosaccharides.

Properties of hydrolyzed lupine protein :

Stimulates the synthesis of structural proteins, favors the synthesis of epidermal lipids, reinforces the natural restructuring systems of the epidermis, maintains the epidermis hydration.

Cosmetic applications:

Hydrolyzed lupin protein is recommended for all repairing, regenerating and hydrating products.

KOMBUCHA

Kombucha also called „long-life fungus“ is well known as a beverage in Russia and China and believed to confer longevity. It is a product of the fermentation of sweet black tea by the symbiosis of two microorganisms. The extract is used in all skin products for 'radiance', anti-ageing, smoothing and re-densifying.

Description:

Kombucha is the Western name for sweetened tea or tisane that has been fermented using a macroscopic solid mass of microorganisms called a "kombucha colony". The culture contains a symbiosis of *Acetobacter* (acetic acid bacteria) and yeast.



A Kombucha culture fermenting in a jar

Constituents of Kombucha:

Kombucha contains many different cultures along with several organic acids, vitamins (group B), active enzymes, amino acids, and polyphenols.

Properties of Kombucha:

Antiglycation activity, re-densifying effect on the adipocyte population, improves overall skin quality by enhancing skin smoothness, radiance and colour.

Cosmetic applications:

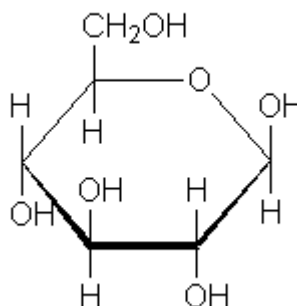
Skin care, particularly anti-ageing or skin smoothing type products.

SACCHARIDES

A lot of Janssen Cosmetics cosmetic formulas contain a highly effective moisturizer that is composed of naturally occurring saccharides. The composition of the saccharide complex is very similar to that of the natural carbohydrate fraction found in the stratum corneum of human skin. It is highly substantive to the skin and binds moisture like a water magnet.

Description:

The saccharide complex is the outcome of a carefully designed process of isomerization of plant-derived D-Glucose.



Alpha-D-Glucose

Properties of Saccharides:

The saccharide complex, used in the Janssen Cosmetics cosmetic formulas, regulates and retains moisture in the skin under any conditions. It is highly substantive to skin, binding itself to Keratin like a magnet. Once bound to the skin surface, it cannot be washed off easily. Therefore the removal of the saccharides occurs only by the natural process of desquamation.

Cosmetic applications:

Day and evening creams, formulations for treating problem dry skin, xerotic skin, UV-exposed skin and aging skin.

VITAMIN E / TOCOPHEROL / TOCOPHERYL ACETATE

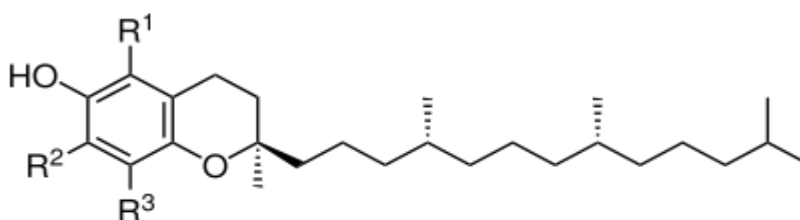
Tocopherol (Vitamin E) is a fat soluble vitamin, that reinforces the antioxidative defenses of cell membranes.

Tocopheryl Acetate is an ester of tocopherol and acetic acid, used to bind free radicals, and support cell renewal and cellular oxygen metabolism. In foods, the most abundant sources of vitamin E are vegetable oils such as palm oil, sunflower, corn, soybean, and olive oil. Nuts, sunflower seeds, seabuckthorn berries and wheat germ are also good sources.

Description:

Tocopherol describes a series of organic compounds consisting of various methylated phenols. Natural vitamin E exists in eight different forms, four tocopherols and four tocotrienols.

Chemical structure:



Properties of Vitamin E:

Vitamin E binds free radicals and prevents their destructive action on lipids, cells and cell membranes. Vitamin E promotes the biological stability of the cells and smoothes and strengthens the skin. It has also moisturizing properties.

Cosmetic applications:

Vitamin E is used in moisturizing creams, sun care, anti-aging products, after sun care, day creams, night creams, body care, hair care.

VITIS VINIFERA (GRAPE) SEED EXTRACT

Grapes, specially the red species such as Pinot Noir, are extraordinary rich in polyphenols. By far the biggest part of them are found in the seeds. In this most precious part of the fruit, these antioxidants protect the lipids of the germ bud against oxidative stress. Procyanidins, a group of polyphenols, show a broad spectrum of activity. In recent studies, they are reported to exert anti-inflammatory, anti-arthritic and antiallergenic activities. Furthermore, procyanidins are very efficient radical scavengers and have therefore been studied as cosmetic ingredients.

Description:

Vitis vinifera (common Grape Vine) is a species of *Vitis*, native to the Mediterranean region, central Europe, and south western Asia, from Morocco and Spain north to southern Germany and east to northern Iran. It is a liana growing to 35 m tall, with flaky bark. The leaves are alternate, palmately lobed, 5–20 cm long and broad. The fruit is a berry, known as a grape;



Vitis vinifera

Constituents of vitis vinifera seed extract:

The seeds of vitis vinifera are rich in procyanidins.

Properties of vitis vinifera seed extract:

Protection of the skin from free radicals.

Cosmetic applications:

Anti-aging, sun care.

ECHIUM OIL

Echium oil is extracted from the seeds of *Echium plantagineum*. The oil contains essential fatty acids (EFA), especially Gamma linolenic acid (GLA) and Stearidonic acid (SA), an EFA metabolite. Although the high levels of EFAs and GLA are undoubtedly of interest, it is the stearidonic acid content of echium oil that makes it unique among plant seed oils. Stearidonic acid is an omega-3 fatty acid that has been shown to exhibit strong anti-inflammatory properties.

Description:

Echium plantagineum (Purple Viper's Bugloss) is a species of *Echium*, native to western and southern Europe (from southern England south to Iberia and east to the Crimea), northern Africa, and southwestern Asia. It is an annual or biennial plant growing to 20-60 cm tall, with rough, hairy, lanceolate leaves up to 14 cm long. The flowers are purple, 15-20 mm long.



Echium plantagineum

Constituents of echium oil:

13% Stearidonic acid (omega-3), 10% Gamma-linolenic (omega-6).

Properties of echium oil:

Stearidonic acid reduces skin inflammation by suppressing the release of arachidonic acid from triglycerides. Gamma-linolenic acid (GLA) is the immediate precursor of an anti-inflammatory eicosanoid, dihomogamma-linolenic acid.

Cosmetic applications:

Anti-wrinkle creams, mature skin treatments, after suns products, soothing/calming products, sensitive/dry skin products, moisturizing creams and lotions, eye and neck treatments.

PEPTIDE COMPLEX AGAINST EYE PUFFINESS AND DARK CIRCLES

The unique Peptide Complex used in Bi-Care Eye Cream consists of specially purified soy and rice peptides, and biotechnologically produced yeast protein. It reduces dark circles and unsightly puffiness around the eyes.

Description:

The unique Peptide Complex used in Bi-Care Eye Cream exerts a positive, localized effect on the hemodynamic properties of blood to improve oxygen supply to the tissue. *In vitro* tests have shown a significant reduction in the rate of blood clotting. Because the complex inhibits elastase and collagenase, it reduces the harmful effects of chronic UV radiation on the connective tissue to help the skin retain its natural firmness. With the help of oxidoreductase, the amount of free radicals, and thus inflammation processes, are minimized, resulting in a visible reduction of puffiness around the eyes.



Constituents of the peptide complex:

Hydrolyzed rice bran protein, oxido reductases, glycine soja (soy bean) protein

Properties of the peptide complex:

Improves blood hemodynamics and microcirculation, reduces the proteolytic breakdown of the collagen and elastin matrix, reduces the presence of free radicals.

Cosmetic applications:

Facial care products, anti-ageing eye care creams and gels

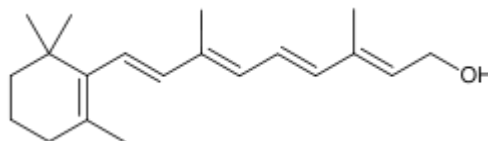
VITAMIN A / RETINOL / RETINYL PALMITATE

Also called the anti-wrinkle vitamin. Due to its instability Vitamin A is present in nature as beta-carotene, its precursor, in which form it is taken up with food and transformed by the body into retinol. Pure Retinol is the original form of vitamin A which the body can use directly. In general a derivative of Vitamin A (retinyl palmitate) is used in skin care products because it is considerably more stable than its free form. The derivative has to be converted into retinol (Vitamin A) by the body prior to its use.

Description:

Vitamin A actually refers to a family of similarly shaped molecules: the retinoids. Its important part is the retinyl group, which can be found in several forms. Vitamin A can also exist as an aldehyde (retinal), or as an acid (retinoic acid). Precursors to the vitamin (provitamins) are present in foods of plant origin as some of the members of the carotenoid family of compounds.

Chemical structure:



Properties of Vitamin A:

Vitamin A is responsible for the normal texture and functioning of skin and other tissues. It activates the natural regeneration of dermal tissue and improves its elasticity. It counteracts excessive cornification of the skin. Delays formation of premature wrinkles.

Cosmetic applications:

Vitamin A /Vitamin A palmitate is used in anti-aging and anti-wrinkle products.