

Tradition in Progress

DEUTSCHE LANOLIN GESELLSCHAFT

Parmentier GmbH & Co. KG



LANOLIN

AND ITS DERIVATIVES

The Natural Choice

www.lanolin.de

Our Product Range

LANOLIN

Lanolin EP ELP	Wool Fat Ph.Eur.	CEP/ COSMOS/ NaTrue/ Halal/ Kosher/ Gardner max. 10	5
Lanolin EP ELP 3%	Wool Fat Ph.Eur., <3% free alcohols	CEP/ COSMOS/ NaTrue/ Halal/ Kosher/ Gardner max. 10	6
Lanolin EP10	Wool Fat Ph.Eur. 1997	CEP/ COSMOS/ Halal/ Kosher/ Gardner max. 10	7
Lanolin EP 8	Wool Fat Ph.Eur. 1997	CEP/ COSMOS/ Halal/ Kosher/ Gardner max. 8	8
Lanolin PC	Lanolin Cosmetic Grade	Halal/ Kosher	9
Lanolin 48	Lanolin Cosmetic Grade	Halal/ Kosher/ 300% Water Uptake	10
Lanolin Wax	Deoiled Lanolin	COSMOS/ NaTrue/ Halal/ Kosher/ Gardner max. 7	11
Lanolin Oil	Liquid Lanolin	COSMOS/ Halal/ Kosher/ Gardner max. 9	12
Lanolin Oil LP	Liquid Lanolin Low Pesticide	COSMOS/ NaTrue/ Halal/ Kosher/ Gardner max. 9	13

LANOLIN ALCOHOL

Lanolin Alcohol D-AG	Lanolin Alcohol Cosmetic Grade	COSMOS/ NaTrue/ Halal/ Kosher/ Gardner max. 10	14
Lanolin Alcohol EP	Wool Alcohols Ph.Eur.	COSMOS/ NaTrue/ Halal/ Kosher/ Gardner max. 10	15
Hydrogenated Lanolin	Hydrogenated Wool Fat		16

LANOLIN FATTY ACIDS

Fatty Acids Bleached	Lanolin Fatty Acids, bleached	Halal/ Gardner max. 12	17
Fatty Acids Unbleached	Lanolin Fatty Acids, unbleached	Halal/ Gardner min. 18	17
Woolgrease Fatty Acids	High Acid Woolgrease	Halal/ Acid Value max. 40	18

LANOLIN DERIVATIVES

PEG-30 Lanolin	Ethoxylated Lanolin, 30 PEG-Units		19
PEG-75 Lanolin	Ethoxylated Lanolin, 75 PEG-Units		20
PEG-75/50 Lanolin	50% aqueous solution of PEG-75 Lanolin		21

MIXTURES

Base SE	Mixtur of PEG-30 Lanolin, Cetyl Alcohol and Paraffin		22
Liquid Absorption Base (LAB)	Mixtur of Lanolin Alcohol, Paraffin and Stearyl Alcohol	Gardner max. 10	23
LLIP	Liquid Lanolin with Isopropyl Palmitate	Halal/ Kosher/ Gardner max. 7	24
CHOLESTEROL	Cholesterol EP, NF Grade	COSMOS/ NaTrue/ Halal/ Kosher	25

Product Applications

Application	Product
After Shave	Lanolin Oil LP/ PEG-Lanolin
Baby Creams & Lotions	Lanolin EP ELP/ Lanolin Wax/ Lanolin Oil LP/ Lanolin Alcohol/ Liquid Absorption Base/ Cholesterol
Baby Oils	Lanolin Oil LP/ Liquid Absorption Base
Bath Foams & Gels	Lanolin Oil LP/ PEG-Lanolin/ Liquid Absorption Base
Body Butters	Lanolin / Lanolin Oil LP/ Lanolin Wax/ Lanolin Alcohol/ Hydr. Lanolin/ Cholesterol
Breast Creams	Lanolin EP ELP 3%/ Lanolin Oil LP
Cleansers	Lanolin/ Lanolin Oil LP/ Lanolin Alcohol/ Hydr. Lanolin/ PEG-Lanolin
Day Creams & Lotions	Lanolin/ Lanolin Wax/ Lanolin Oil LP/ Lanolin Alcohol/ Hydr. Lanolin/ PEG-Lanolin/ Base SE/ LLIP
Deodorants	Lanolin/ Lanolin Wax/ Lanolin Oil LP/ Lanolin Alcohol/ Hydr. Lanolin/ PEG-Lanolin/ ALAC/ Base SE
Eye Ointments	Lanolin EP ELP
Foundations & Liquid Make-Up	Lanolin/ Lanolin Wax/ Lanolin Oil LP/ Lanolin Alcohol/ Hydr. Lanolin/ ALAC/ Base SE/ Liquid Absorption Base
Hair Conditioners	Lanolin/ Lanolin Wax/ Lanolin Alcohol/ Hydr. Lanolin/ PEG-Lanolin
Hair Dressing	Lanolin/ Lanolin Oil LP/ Lanolin Alcohol/ Hydr. Lanolin
Hair Dyes	Lanolin Alcohol/ PEG-Lanolin/ Cholesterol
Hair Shampoos	Lanolin/ Lanolin Alcohol/ PEG-75 Lanolin
Hair Sprays	Lanolin Alcohol/ ALAC/ LLIP
Hair Wax	Lanolin Wax/ PEG-Lanolin
Hypo-Allergenic Cosmetic	Lanolin EP ELP 3%/ Cholesterol
Leather Care	Lanolin EP10/ Lanolin Oil/ Woolgrease Fatty Acids/ Lanolin Fatty Acids
Liposomes	Cholesterol
Lipsticks & Lip Balm	Lanolin/ Lanolin Wax/ Lanolin Oil LP/ Lanolin Alcohol/ Hydr. Lanolin/ ALAC
Lubricant	Lanolin EP10/ Lanolin Fatty Acids/ Woolgrease Fatty Acids
Nailcare	Lanolin Oil LP/ Base SE/ Liquid Absorption Base
Night Creams	Lanolin/ Lanolin Wax/ Lanolin Oil LP/ Lanolin Alcohol/ Hydr. Lanolin/ Base SE/ Liquid Absorption Base/ LLIP/ Cholesterol
Pharmaceutical Creams & Lotions	Lanolin EP ELP/ Lanolin Alcohol EP/ Cholesterol EP
Rust Preventive	Lanolin EP10/ Lanolin Fatty Acids/ Woolgrease Fatty Acids
Shaving Products	Lanolin/ Lanolin Alcohol/ Hydr. Lanolin/ Lanolin Fatty Acids
Soaps	Lanolin / Lanolin Oil LP/ Lanolin Alcohol/ Hydr. Lanolin/ PEG-Lanolin
Sunscreen	Lanolin / Lanolin Oil LP/ Lanolin Wax/ Lanolin Alcohol/ ALAC/ Base SE/ Liquid Absorption Base/ LLIP/ Cholesterol
Teat Dip	Lanolin/ Lanolin Oil/ Lanolin Alcohol/ PEG-Lanolin
Wipes	Lanolin/ Lanolin Oil LP/ Lanolin Alcohol/ PEG-Lanolin/ ALAC/ LLIP
Wool Wash Detergents	Lanolin/ Lanolin Oil/ Lanolin Alcohol/ PEG-Lanolin

The Natural Choice

Almost 40% reduction in skin roughness in just 1 hour.*

Proven over thousands of years.

100% natural.

Lanolin – Nature’s Original Skin Protection

It is difficult to identify a substance that could surpass lanolin in its effectiveness in the treatment and prevention of dry and rough skin. It is a completely natural product that is produced from the multi-stage refining of wool grease, a natural, renewable raw material, which is obtained from the scouring (washing) of raw wool. In nature, it protects the wool and skin against the detrimental effects of bad weather. Similar to its natural function, lanolin protects and improves the structure of skin and hair.

Lanolin - A Versatile Product

Lanolin is available in liquid, semi-solid or solid form, with all of them having common emollient properties. Lanolin alcohol is an emollient as well as an excellent, natural W/O emulsifier. The range of lanolin products is completed by water-soluble forms and various bases for the manufacturing of creams and ointments.



* I. Steel, Lanolin and Lanolin Derivatives, in: The Lanolin Book, 1999

Quality Throughout

Without stabilisers (ECOCERT/ NATRUE certified).*

Hypoallergenic lanolin available.

Lowest residual pesticide content.

Lanolin – Highest Purity

Our lanolin and lanolin derivatives are manufactured by our partner NK Ingredients in a highly modern facility under the highest quality standards. The results are products that even exceed in some parts the purity requirements of the current pharmacopoeias. We do not add any stabilisers, so that lanolin stays as a natural product - without compromising shelf life.*

Our Partner

Since 1998, the DEUTSCHE LANOLIN GESELLSCHAFT cooperated closely with NK Ingredients, Singapore. NK Ingredients was founded in 1994 as a specialised enterprise for the production of lanolin and its derivatives. The company has the largest modern and integrated lanolin manufacturing operation in the world and is GMP certified. Since 2013, NK has its own wool scouring plant operating in Malaysia that is located near to the Singaporean border. This way, NK Ingredients has not only a better control on the quality of raw material, but it is also less dependent on the world market prices for raw wool fat.



* Available with BHT or tocopherol upon request.

Lanolin EP ELP

Anhydrous Lanolin - Wool Fat Ph.Eur.

Composition and Description

Lanolin EP ELP is produced from the multi-stage refining of wool grease, a natural, renewable raw material, which is obtained from the scouring (washing) of raw wool. It is yellowish with a waxy consistency and melts at temperatures above 40 °C. Lanolin is a complex mixture of esters, di-esters and hydroxy-esters of sterols and aliphatic alcohols with medium- to long-chain fatty acids.

Features

Lanolin EP ELP meets the requirements of the current European Pharmacopoeia and is characterised by its high purity, light colour, low odour and very low pesticide level. Since it is manufactured gently in modern facilities, the initial peroxide value (measure of oxidation) is very low. Therefore **Lanolin EP ELP** does not need additional stabilisers. Nevertheless, a shelf life of 2 years is guaranteed. Upon request, BHT or natural alpha-tocopherol can be added as stabilisers.

Applications

The product can be used in applications where colour, odour and purity are critical. **Lanolin EP ELP** has been refined to a point where trace pesticide residues are undetectable. The high purity without sacrificing product colour makes it ideal for use in topical pharmaceutical preparations, suppositories, lip products and baby creams or lotions.

Dermatology

Lanolin has a pronounced emollient effect on the skin. Cracked skin and fissures are flattened and widened due to the natural, moisturizing properties of lanolin. Nearly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is used in many pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be no more than 5.5 cases per million people. The oral LD50 is great-

er than 16 g/kg and no irritating effect on the skin even after regular administration was observed.

Processing

Lanolin EP ELP is easy to use and it may be processed in both cold and melted forms. It is non-hazardous and melts easily with a relatively low volatility. Prolonged heating above the melting point should be avoided. However, heat sterilisation is possible. **Lanolin EP ELP** should be stored cool, protected from light in containers and surface exposure to air should be kept at minimum.

Solubility at room temperature

Water: none; mineral oil: partially soluble; castor oil: soluble; oleyl alcohols: soluble; isopropyl myristate: partially soluble

Specifications

Colour, Gardner	10 max.
Acid Value, mgKOH/g	1.0 max.
Saponification Value, mgKOH/g	90-105
Melting Point, °C	38-44
Peroxide Value, me/kg	10 max.
Water Abs. Capacity, %	200 min.
Ash, %	0.15 max.
Loss On Drying, %	0.5 max.
Chlorides	meets Ph.Eur.
Water Soluble Acids/Alkalis	meets Ph.Eur.
Water Soluble Oxid. Subst.	meets Ph.Eur.
Paraffins, %	1.0 max.
Total Pesticides	1 ppm max.

Packaging sizes	18, 25, 50 and 190 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin EP ELP 3%

Anhydrous Lanolin - Wool Fat Ph.Eur.

Composition and Description

Lanolin EP ELP 3% is produced from multi-stage refining of woolgrease, a natural and renewable raw material, which is obtained from the scouring (washing) of raw wool. It differs from conventional **Lanolin EP ELP** by the guaranteed content of free alcohols below 3%. It is yellowish with a waxy consistency and melts at temperatures above 40 °C. Lanolin is a complex mixture of esters, di-esters and hydroxy-esters of sterols and aliphatic alcohols with medium- to long-chain fatty acids.

Features

Lanolin EP ELP 3% meets the requirements of the current European Pharmacopoeia and is characterised by its high purity, light colour, low odour and very low pesticide level. It is purified by molecular distillation that results into less than 3% of free wool wax alcohols. Since it is manufactured gently in modern facilities, the initial peroxide value (measure of oxidation) is very low. Therefore **Lanolin EP ELP 3%** does not need additional stabilisers. Nevertheless, a shelf life of 2 years is guaranteed. Upon request, BHT or natural alpha-tocopherol can be added as stabilisers.

Applications

Studies have shown that possible allergic effects of lanolin can be almost entirely avoided by a reduction of free lanolin alcohols below 3%. Therefore **Lanolin EP ELP 3%** is especially suitable for the use in baby creams and lotions, on sensitive or damaged skin and whenever highest purity is required.

Dermatology

Lanolin has a pronounced emollient effect on the skin. Cracked skin and fissures are flattened and widened due to the natural, moisturizing properties of lanolin. Nearly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is used in many pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be no more than

5.5 cases per million people. The reduction in the proportion of free lanolin alcohols in **Lanolin EP ELP 3%** should result in a significantly lower allergy rate. The oral LD50 is greater than 16 g/kg and no irritating effect on the skin even after regular administration was observed.

Processing

Usage of **Lanolin EP ELP 3%** is easy to use and it may be processed both cold and melted forms. It is non-hazardous and melts easily with a relatively low volatility. Prolonged heating above the melting point should be avoided. However, heat sterilisation is possible. **Lanolin EP ELP 3%** should be stored cool, protected from light in containers and surface exposure to air should be kept at minimum.

Solubility at room temperature

Water: none; mineral oil: partially soluble; castor oil: soluble; oleyl alcohols: soluble; isopropyl myristate: partially soluble

Specifications

Colour, Gardner	10 max.
Acid Value, mgKOH/g	1.0 max.
Saponification Value, mgKOH/g	90-105
Melting Point, °C	38-44
Peroxide Value, me/kg	10 max.
Water Abs. Capacity, %	200 min.
Ash, %	0.15 max.
Loss On Drying, %	0.5 max.
Chlorides	meets Ph.Eur.
Water Soluble Acids/Alkalis	meets Ph.Eur.
Water Soluble Oxid. Subst.	meets Ph.Eur.
Paraffins, %	1.0 max.
Free alcohols, %	3.0 max.
Total Pesticides	1 ppm max.

Packaging sizes	50 and 190 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin EP10

Anhydrous Lanolin - Wool Fat Ph.Eur. 1997

Composition and Description

Lanolin EP10 is produced from the multi-stage refining of woolgrease, a natural, renewable raw material, which is obtained from the scouring (washing) of raw wool. It is yellowish with a waxy consistency and melts at temperatures above 40 °C. Lanolin is a complex mixture of esters, di-esters and hydroxy-esters of sterols and aliphatic alcohols with medium- to long-chain fatty acids.

Features

Lanolin EP10 is manufactured according to the requirements of the European Pharmacopoeia 1997 (without testing the pesticide residues) and is a cheaper alternative to Lanolin EP ELP. Since it is manufactured gently in modern facilities, the initial peroxide value (measure of oxidation) is very low. Therefore **Lanolin EP10** does not need additional stabilisers. Nevertheless, a shelf life of 2 years is guaranteed. Upon request, BHT or natural alpha-tocopherol can be added as stabilisers.

Applications

Lanolin EP10 can be used in all cosmetic formulations such as toiletries, skin care and hair care formulations, make-up products, soaps and all pharmaceutical formulations.

Dermatology

Lanolin has a pronounced emollient effect on the skin. Cracked skin and fissures are flattened and widened due to the natural and moisturizing properties of lanolin. Nearly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is used in many pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be no more than 5.5 cases per million people. The oral LD50 is greater than 16 g/kg and no irritating effect on the skin was observed even after regular administration.

Processing

No special handling is required on the usage of **Lanolin EP10** and it may be processed both cold and melted. It is non-hazardous and easily meltable with a relatively low volatility. Prolonged heating above the melting point should be avoided. However, heat sterilisation is possible. **Lanolin EP10** should be stored cool, protected from light in containers and surface exposure to air should be kept at minimum.

Solubility at room temperature

Water: none; mineral oil: partially soluble; castor oil: soluble; oleyl alcohols: soluble; isopropyl myristate: partially soluble

Specifications

Colour, Gardner	10 max.
Acid Value, mgKOH/g	1.0 max.
Saponification Value, mgKOH/g	90-105
Melting Point, °C	38-44
Peroxide Value, me/kg	20 max.
Water Abs. Capacity, %	200 min.
Ash, %	0.15 max.
Loss On Drying, %	0.5 max.
Chlorides	meets Ph.Eur. 1997
Water Soluble Acids/Alkalis	meets Ph.Eur. 1997
Water Soluble Oxid. Subst.	meets Ph.Eur. 1997
Paraffins, %	1.0 max.

Packaging sizes	50 and 190 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin EP8

Anhydrous Lanolin - Wool Fat Ph.Eur. 1997

Composition and Description

Lanolin EP8 is produced from the multi-stage refining of woolgrease, a natural, renewable raw material, which is obtained from the scouring (washing) of raw wool. It is yellowish with a waxy consistency and melts at temperatures above 40 °C. Lanolin is a complex mixture of esters, di-esters and hydroxy-esters of sterols and aliphatic alcohols with medium- to long-chain fatty acids.

Features

Lanolin EP8 is manufactured according to the requirements of the European Pharmacopoeia 1997 (without testing the pesticide residues) and is a cheaper alternative to Lanolin EP ELP. In addition, it offers a light colour of Gardner 8 that allows its use also in applications where colour is key. Since it is manufactured gently in modern facilities, the initial peroxide value (measure of oxidation) is very low. Therefore **Lanolin EP8** does not need additional stabilisers. Nevertheless, a shelf life of 2 years is guaranteed. Upon request, BHT or natural alpha-tocopherol can be added as stabilisers.

Applications

Lanolin EP8 can be used in all cosmetic formulations such as toiletries, skin care and hair care formulations, make-up products, soaps and all pharmaceutical formulations.

Dermatology

Lanolin has a pronounced emollient effect on the skin. Cracked skin and fissures are flattened and widened due to the natural and moisturizing properties of lanolin. Nearly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is used in many pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be no more than 5.5 cases per million people. The oral LD50 is greater than 16 g/kg and no irritating effect on the skin was

observed even after regular administration.

Processing

No special handling is required on the usage of **Lanolin EP8** and it may be processed both cold and melted. It is non-hazardous and easily meltable with a relatively low volatility. Prolonged heating above the melting point should be avoided. However, heat sterilisation is possible. **Lanolin EP8** should be stored cool, protected from light in containers and surface exposure to air should be kept at minimum.

Solubility at room temperature

Water: none; mineral oil: partially soluble; castor oil: soluble; oleyl alcohols: soluble; isopropyl my-

Specifications

Colour, Gardner	8 max.
Acid Value, mgKOH/g	1.0 max.
Saponification Value, mgKOH/g	90-105
Melting Point, °C	38-44
Peroxide Value, me/kg	20 max.
Water Abs. Capacity, %	200 min.
Ash, %	0.15 max.
Loss On Drying, %	0.5 max.
Chlorides	meets Ph.Eur. 1997
Water Soluble Acids/Alkalis	meets Ph.Eur. 1997
Water Soluble Oxid. Subst.	meets Ph.Eur. 1997
Paraffins, %	1.0 max.

Packaging sizes	50 and 190 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin PC

Anhydrous Lanolin Cosmetic Grade

Composition and Description

Lanolin PC is produced from multi-stage refining of woolgrease, a natural and renewable raw material, which is obtained from the scouring (washing) of raw wool. It is yellowish with a waxy consistency and melts at temperatures above 40 °C. Lanolin is a complex mixture of esters, di-esters and hydroxy-esters of sterols and aliphatic alcohols with medium- to long-chain fatty acids.

Features

The product can be used in many applications where lanolin in pharmacopoeia quality is not required. It is a cheaper alternative to Lanolin EP ELP.

Applications

Lanolin PC can be used in all cosmetic formulations such as toiletries, skin care and hair care formulations, make-up products and soaps. Apart from cosmetic products, this high degree purity of Lanolin PC can be used as lubricants for can coating, veterinary ointments, adhesives and leather care products.

Dermatology

Lanolin has a pronounced emollient effect on the skin. Skin cracked and fissures in the skin are flattened and widened due to the natural, moisturizing properties of lanolin. Nearly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is widely used in pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be no more than 5.5 cases per million people. The oral LD50 is greater than 16 g/kg and no irritating effect on the skin even after regular administration was observed.

Processing

Usage of **Lanolin PC** is easy to use and it may be processed in both cold and melted forms. It is non-hazardous and melts easily with a relatively low volatility. Prolonged heating above the melting

point should be avoided. However, heat sterilisation is possible. **Lanolin PC** should be stored cool, protected from light in containers and surface exposure to air should be kept at minimum.

Solubility at room temperature

Water: none; mineral oil: partially soluble; castor oil: soluble; oleyl alcohols: soluble; isopropyl myristate: partially soluble



Specifications

Colour, Gardner	10 max.
Acid Value, mgKOH/g	1.0 max.
Saponification Value, mgKOH/g	90-105
Melting Point, °C	38-44
Ash, %	0.15 max.
Loss On Drying, %	0.5 max.
Chlorides	Complies
Water Soluble Acids/Alkalis	Complies
Water Soluble Oxid. Subst.	Complies
Paraffins, %	Complies

Packaging sizes	50 and 190 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin 48

Anhydrous Lanolin Cosmetic Grade

Composition and Description

Lanolin 48 is produced from multi-stage refining of woolgrease, a natural and renewable raw material, which is obtained from the scouring (washing) of raw wool. It is yellowish with a waxy consistency and melts at temperatures above 40 °C. Lanolin is a complex mixture of esters, di-esters and hydroxy-esters of sterols and aliphatic alcohols with medium- to long-chain fatty acids.

Features

Lanolin 48 has a water uptake of 300% and a higher melting point than other lanolin grades. Thus it can be used in applications, where excellent emulsification and stabilisation properties are needed.

Applications

Lanolin 48 can be used in all cosmetic formulations such as toiletries, skin care and hair care formulations, make-up products and soaps.



Dermatology

Lanolin has a pronounced emollient effect on the skin. Skin cracked and fissures in the skin are flattened and widened due to the natural, moisturizing properties of lanolin. Nearly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is widely used in pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be

no more than 5.5 cases per million people. The oral LD50 is greater than 16 g/kg and no irritating effect on the skin even after regular administration was observed.

Processing

Usage of **Lanolin 48** is easy to use and it may be processed in both cold and melted forms. It is non-hazardous and melts easily with a relatively low volatility. Prolonged heating above the melting point should be avoided. However, heat sterilisation is possible. **Lanolin 48** should be stored cool, protected from light in containers and surface exposure to air should be kept at minimum.

Solubility at room temperature

Water: none; mineral oil: partially soluble; castor oil: soluble; oleyl alcohols: soluble; isopropyl myristate: partially soluble

Specifications

Colour, Gardner	10 max.
Acid Value, mgKOH/g	1.2 max.
Free Fatty Acids, %	0.6 max.
Saponification Value, mgKOH/g	80-120
Water Absorption Capacity, %	300 min.
Melting Point, °C	40-48
Ash, %	0.2 max.
Loss On Drying, %	0.5 max.

Packaging sizes	50 and 190 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin Wax

Lanolin Cera - Deoiled Lanolin

Composition and Description

Lanolin WAX is a special type of pharmaceutical wool wax, in which the content of natural esters with low emulsifying capacity has been reduced by fractional crystallisation at low temperature without chemical changes. **Lanolin WAX** is a complex mixture of esters, di-esters and hydroxy-esters of sterols and aliphatic alcohols with medium- to long-chain fatty acids.

Features

Lanolin WAX is closely similar to the normal lanolin. However, it forms W/O emulsions with greater stability, particularly at higher temperatures. It is absorbed by the stratum corneum of the skin and has good emollient properties. The appearance of **Lanolin WAX** is more opaque than conventional lanolin. The texture is less sticky and firmer. Since it is manufactured gently in modern facilities, the initial peroxide value (measure of oxidation) is very low. Therefore **Lanolin WAX** does not need additional stabilisers. Nevertheless, a shelf life of 2 years is guaranteed. Upon request, BHT or natural alpha-tocopherol can be added as stabilisers.

Applications

The use of **Lanolin WAX** is particularly suited for W/O emulsified creams and ointments, where high stability is required, especially at tropical temperatures. The resulting emulsions are of pleasant white colour. Hair creams made with **Lanolin WAX** give the hair a stronger texture. They are non-ionic and insensitive to water-soluble electrolytes and humectants in a wide range of pH, a prerequisite for highly emollient creams.

Dermatology

Lanolin WAX is chemically very similar to anhydrous lanolin and complies in all respects with the requirements of many pharmacopoeia with the exception of its melting point. Lanolin has a pronounced emollient effect on the skin. Cracked skin and fissures are flattened and widened due to the natural, moisturizing properties of lanolin. Near-

ly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is used in many pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be no more than 5.5 cases per million people. The oral LD50 is greater than 16 g/kg and no irritating effect on the skin even after regular administration was observed.

Processing

Lanolin WAX is easy to use and it may be processed both cold and melted forms. Heating at temperature close to the melting point for up to four weeks have negligible impact. Longer heating at higher temperatures, particularly above 80 °C should be avoided. To protect against autoxidation **Lanolin WAX** should be stored at cool temperatures in closed containers.

Solubility at room temperature

Water: none; acetone: partially soluble; ethanol, anhydrous: partially soluble; isopropanol anhydrous: partially soluble; mineral oil: partially soluble; isopropyl myristate: partially soluble

Specifications

Colour, Gardner	7 max.
Acid Value, mgKOH/g	1.0 max.
Saponification Value, mgKOH/g	90-110
Melting Point, °C	45-52
Iodine Value	18-36
Ash, %	0.1 max.
Loss On Drying, %	0.5 max.
Water Soluble Oxid. Subst.	complies

Packaging sizes	50 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin Oil

Lanolin Oil - Liquid Lanolin

Composition and Description

Lanolin OIL, chemically similar to the pharmaceutical lanolin, is in liquid form, because parts of the natural esters of lanolin that are solid at room temperature have been removed by fractional crystallisation at a low temperature. Thus, **Lanolin OIL** consists only of the low molecular weight fractions of lanolin.



Features

Lanolin OIL not only has the important properties of lanolin, namely good emollient properties and W/O emulsifying capacity, but it also has the added benefit of being a liquid. **Lanolin OIL** is therefore easier to handle and is more readily absorbed by the skin. Furthermore, it is soluble in many oils without sedimentation.

Applications

Lanolin OIL is an excellent emollient in water-free skin lotions, cleansing-, bath- and hair-oils, etc., where low viscosity and clarity are of importance. It is a powerful skin moisturiser not only in oils, but also in both O/W and W/O emulsions, such as creams for dry skin, day-, sports- and conditioner-creams. Increased stability can be achieved by replacing a portion of the mineral content of a W/O emulsion with **Lanolin OIL**.

Dermatology

Lanolin OIL is the physically separated liquid fraction from lanolin. It can be considered safe and harmless. Tests with liquid lanolin according to FDA requirements showed that it is not an eye irritant. Lanolin has a pronounced emollient effect on the

skin. Cracked skin and fissures are flattened and widened due to the natural, moisturizing properties of lanolin. Nearly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is widely used in pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be no more than 5.5 cases per million people. The oral LD50 is greater than 16 g/kg and no irritating effect on the skin even after regular administration was observed.

Processing

Lanolin OIL is harmless. At lower temperatures it might become solid, but it can easily reliefs by slight warming. Prolonged heating to temperatures above 50 °C should be avoided. **Lanolin OIL** should be stored in tightly closed containers away from heat sources.

Solubility at room temperature

Acetone: soluble; absolute ethanol: partially soluble; isopropanol anhydrous: not soluble; mineral oil: soluble; isopropyl myristate: soluble

Specifications

Colour, Gardner	9 max.
Acid Value, mgKOH/g	2.0 max.
Saponification Value, mgKOH/g	90-110
Cloud Point, °C	20 max.
Iodine Value	20-40
Ash, %	0.15 max.
Loss On Drying, %	0.5 max.
Water Soluble Oxid. Subst.	complies

Packaging sizes	50 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin Oil LP

Lanolin Oil LP - Liquid Lanolin

Composition and Description

Lanolin OIL LP, chemically similar to the pharmaceutical lanolin, is in liquid form because parts of the natural esters of lanolin that are solid at room temperature have been removed by fractional crystallisation at a low temperature. Thus, **Lanolin OIL LP** consists only of the low molecular weight fractions of lanolin. **Lanolin OIL LP** is characterized by the very low level of pesticides of 3 ppm (LP = low pesticide) and is therefore particularly suitable for use in baby care products.

Features

Lanolin OIL LP not only has the important properties of lanolin, namely good emollient properties and W/O emulsifying capacity, but it also has the added benefit of being a liquid. **Lanolin OIL LP** is therefore easier to handle and is more readily absorbed by the skin. Furthermore, it is soluble in many oils without sedimentation.

Applications

Lanolin OIL LP is an excellent emollient in water-free skin lotions, cleansing-, bath- and hair-oils, etc., where low viscosity and clarity are of importance. It is a powerful skin moisturiser not only in oils, but also in both O/W and W/O emulsions, such as creams for dry skin, day-, sports- and conditioner-creams. Increased stability can be achieved by replacing a portion of the mineral content of a W/O emulsion with **Lanolin OIL LP**.

Dermatology

Lanolin OIL LP is the physically separated liquid fraction from lanolin. It can be considered safe and harmless. Tests with liquid lanolin according to FDA requirements showed that it is not an eye irritant. Lanolin has a pronounced emollient effect on the skin. Cracked skin and fissures are flattened and widened due to the natural, moisturizing properties of lanolin. Nearly 40% reduction in skin roughness is achieved in just 1 hour. Lanolin is used in many

pharmaceutical and cosmetic products and only very few cases of allergic reactions were observed. The incidence of lanolin allergy in the general population has been estimated to be no more than 5.5 cases per million people. The oral LD50 is greater than 16 g/kg and no irritating effect on the skin even after regular administration was observed.

Processing

Lanolin OIL LP is harmless. At lower temperatures it might become solid, but it can easily reliefs by slight warming. Prolonged heating to temperatures above 50 °C should be avoided. **Lanolin OIL LP** should be stored in tightly closed containers away from heat sources.

Solubility at room temperature

Acetone: soluble; absolute ethanol: partially soluble; isopropanol anhydrous: not soluble; mineral oil: soluble; isopropyl myristate: soluble

Specifications

Colour, Gardner	9 max.
Acid Value, mgKOH/g	2.0 max.
Saponification Value, mgKOH/g	90-110
Cloud Point, °C	20 max.
Iodine Value	20-40
Ash, %	0.15 max.
Loss On Drying, %	0.5 max.
Water Soluble Oxid. Subst.	complies
Total Pesticides	3 ppm max.

Packaging sizes	50 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin Alcohol DAG

Lanolin Alcohol - Cosmetic Grade

Composition and Description

Lanolin Alcohol COSMETIC GRADE is a cheaper alternative to Lanolin Alcohol EP. It consists of the highly refined, unsaponifiable fraction of wool wax, which is additionally subjected to molecular distillation to improve both colour and odour. Synonyms: wool wax alcohols, lanolin alcohols, wool alcohols. **Lanolin Alcohol COSMETIC GRADE** is a very complex mixture of alcohols with a mean molecular weight of about 370 Da, consisting of cholesterol, lanosterol, agnosterol, and their dihydro derivatives as well as straight and branched chain aliphatic alcohols.

Features

The cholesterol content in **Lanolin Alcohol COSMETIC GRADE** is lower than in the pharmaceutical quality Lanolin Alcohol EP, because it is molecularly distilled from a wool alcohol grade, from which a major part of the cholesterol was extracted (for making NK cholesterol). This is also the reason why this grade can be offered at a lower price. Despite the reduced cholesterol content, the emulsifying properties are in no way less than that of the pharmacopoeial quality. Since it is manufactured gently in modern facilities, the initial peroxide value (measure of oxidation) is very low. Therefore **Lanolin Alcohol COSMETIC GRADE** does not need additional stabilisers. Nevertheless, a shelf life of 2 years is guaranteed. Upon request, BHT or natural alpha-tocopherol can be added as stabilisers.

Applications

Lanolin Alcohol COSMETIC GRADE can be used for the same application as Lanolin Alcohol EP. Its emulsifying properties can be increased by the addition of cetyl alcohol, beeswax or lanolin (de-oiled). These mixtures are the basis of ointments with an remarkably good colour characteristic. **Lanolin Alcohol COSMETIC GRADE** can be used in small quantities as a thickening agent in shampoos and bath gels.

Dermatology

Lanolin Alcohol COSMETIC GRADE consists of Wool Alcohols, a substance that is used in many pharmaceutical and cosmetic products. In only very few cases an allergic reaction was observed. The substance is also listed in pharmacopoeias such as in the Ph. Eur. and USP. Wool Alcohols showed an LD50 in acute oral toxicity test greater than the maximum administered dose, reflecting an extremely low toxicity.

Processing

Lanolin Alcohol COSMETIC GRADE is easy to use. It is safe, melts easily and has a relatively low volatility. Prolonged heating above the melting point should be avoided. In cases where cholesterol crystals are still present after melting, the melt can be further heated to 115 °C. Subsequently, it should be quickly cooled down. **Lanolin Alcohol COSMETIC GRADE** should be stored cool and dry in well-sealed containers in preferably large pieces with minimal surface area.

Solubility at room temperature

Water: none; mineral oil: partially soluble; castor

Specifications

Colour, Gardner	10 max.
Acid Value, mgKOH/g	2.0 max.
Saponification Value, mgKOH/g	10 max.
Melting Point, °C	45-55
Water Abs. Capacity, %	200 min.
Ash, %	0.15 max.
Loss On Drying, %	0.5 max.
Cholesterol (GC), %	5.0 min.
Total Pesticides	1 ppm max.

Packaging sizes	50 and 190 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Lanolin Alcohol EP

Lanolin Alcohol - Wool Alcohol Ph.Eur.

Composition and Description

Lanolin Alcohol EP consists of the highly refined, unsaponifiable fraction of wool wax, which is additionally subjected to molecular distillation to improve both colour and odour. Synonyms: wool wax alcohols, lanolin alcohols, wool alcohols. **Lanolin Alcohol EP** is a very complex mixture of alcohols with a mean molecular weight of about 370 Da, consisting of cholesterol, lanosterol, agnosterol, and their dihydro derivatives as well as straight and branched chain aliphatic alcohols.

Features

Lanolin Alcohol EP is distinguished from normal lanolin alcohol by its bright colour and faint odour. It is a strong W/O- emulsifier in the form of a hard, semi-crystalline wax and fulfils the requirements of the monograph 'Wool Alcohols' of the European Pharmacopoeia. Only the best raw material is used for production and process conditions are chosen to ensure that the product does not degrade thermally or chemically. Since it is manufactured gently in modern facilities, the initial peroxide value (measure of oxidation) is very low. Therefore **Lanolin Alcohol EP** does not need additional stabilisers. Nevertheless, a shelf life of 2 years is guaranteed. Upon request, BHT or natural alpha-tocopherol can be added as stabilisers.

Applications

The good colour characteristic and low odour of **Lanolin Alcohol EP** works well in creams of highest quality, where maximum white colour is important, e.g. in sports creams, hair creams, creams for dry skin, etc. Its emulsifying properties can be increased by addition of cetyl alcohol, beeswax or lanolin (deoiled). These mixtures are the basis of ointments with a remarkably good colour. **Lanolin Alcohol EP** can be used in small quantities as a thickening agent in shampoos and bath gels.

Dermatology

Lanolin Alcohol EP consists of Wool Alcohols Ph. Eur., a substance that is used in many pharmaceutical and cosmetic products. In only very few cases

an allergic reaction was observed. The substance is also listed in other pharmacopoeias such as in the USP. Wool Alcohols showed an LD50 in acute oral toxicity test greater than the maximum administered dose, reflecting an extremely low toxicity.

Processing

Lanolin Alcohol EP is easy to use. It is safe, melts easily and has a relatively low volatility. Prolonged heating above the melting point should be avoided. In cases where cholesterol crystals are still present after melting, the melt can be further heated to 115 °C. Subsequently, it should be quickly cooled down. **Lanolin Alcohol EP** should be stored cool and dry in well-sealed containers in preferably large pieces with minimal surface area.

Solubility at room temperature

Water: none; mineral oil: partially soluble; castor oil: soluble; oleyl alcohols: soluble; isopropyl myristate: partially soluble

Specifications

Colour, Gardner	10 max.
Acid Value, mgKOH/g	2.0 max.
Saponification Value, mgKOH/g	12 max.
Hydroxyl Value, mgKOH/g	120-180
Melting Point, °C	58 min.
Peroxide Value, me/kg	15 max.
Water Abs. Capacity, %	200 min.
Ash, %	0.1 max.
Loss On Drying, %	0.5 max.
Cholesterol (GC), %	30.0 min.
Total Pesticides	3 ppm max.

Packaging sizes	25 kg, kibbled 24 kg, in 1,5 kg blocks 25, 50 and 190 kg in drum
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Hydrogenerated Lanolin

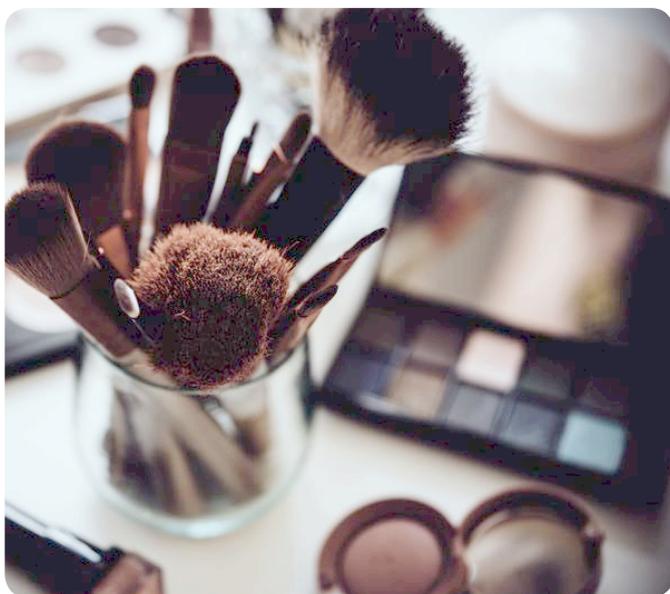
Hydrogenerated Wool Fat

Composition and Description

HYDROGENATED LANOLIN is obtained from purified lanolin by direct hydrogenation at high pressure and temperature. Both the free acids and the esters of the wax are reduced to alcohols, and the double bonds are saturated. **HYDROGENATED LANOLIN** is composed of about 48%–62% dihydroxy and 18%–30% monohydroxy alcohols, as well as 10%–15% hydrocarbons and 2%–4% esters.

Features

HYDROGENATED LANOLIN is characterized by a particularly bright colour and a neutral odour. Moreover, it is less tacky than conventional lanolin, but still has comparable emollient properties. Since **HYDROGENATED LANOLIN** consists almost exclusively of alcohols, it is very similar in its properties to lanolin alcohols and can also be used as a W/O emulsifier.



Applications

The use of this product is recommended in cosmetic formulations where colour and odour are important. In general, the use of 2%–10% as base, W/O emulsifier, emollient or antistatic agent in ointments, creams, lotions, as well as in decorative

cosmetics and hair and eye care products is recommended.

Dermatology

HYDROGENATED LANOLIN has emollient properties similar to lanolin. It is used in many pharmaceutical and cosmetic products. In only a very few cases has an allergic reaction been observed. The oral LD50 was reported in various studies to be above at least 5 g/kg, and up to above 64 ml/kg. In a human study, no irritating effect on the skin was observed.

Processing

HYDROGENATED LANOLIN is easy to use and should be processed in its melted form. It is safe, easy to melt and has relatively low volatility. Heat sterilization is possible. **HYDROGENATED LANOLIN** is more stable than conventional lanolin, but should be kept cool and protected from light. Since it has no double bonds, it has low susceptibility to oxidation.

Solubility at room temperature

Water: insoluble; Mineral oil: partially soluble; Chloroform: soluble; Ethyl ether: soluble.

Specifications

Appearance	White, waxy solid
Acid Value, mgKOH/g	0.2 max.
Saponification Value, mgKOH/g	6.0 max.
Hydroxyl Value, mgKOH/g	130-180
Dropping Point, °C	44-50
Iodone Value	8-15

Packaging sizes	20 and 170 kg
Shelf life	3 years
Storage	Tightly closed, at ambient temperature

Fatty Acids (Bleached and Unbleached)

Fatty Acids Bleached and Unbleached - Wool Fatty Acids

Composition and Description

LANOLIN FATTY ACIDS are produced from the hydrolysis of lanolin, a natural, renewable raw material, which is obtained from the scouring (washing) of raw wool. It is a highly complex mixture of fatty acids, composed of roughly 40% by weight of straight-chain acids, 20% of branched-chain acids and approximately 40% of hydroxy acids. The majority of this mixture of fatty acids is saturated with carbon chain lengths of between C8 and C40.



Features

LANOLIN FATTY ACIDS are a by-product of the manufacture of lanolin alcohol; this is therefore very cost-efficient. It is a unique product with the consistency of a soft wax, and has yellow-to-cream colour. Its soaps have o/w emulsifying properties, and in emulsions the imperfect solubility of soaps does not present a problem.

Applications

LANOLIN FATTY ACIDS are mostly used in technical applications, such as anti-corrosives, lubricants, liquid and semi-solid polishes and textile additives. They are not generally used in their natural form in cosmetic products, but rather as a neutralized soap in applications such as o/w creams and shaving soaps. **LANOLIN FATTY ACIDS** (Bleached) give a smooth texture to creams and appear to have a mild emollient function. This product also makes a useful feedstock for lanolin esters such as Isopropyl

Lanolate, Glyceryl Lanolate and Methyl Lanolate.

Dermatology

LANOLIN FATTY ACIDS, used in the form of soaps, has elicited no reports of adverse reactions in over 50 years of use, and is generally recognized as non-toxic and safe. It is, however, not recommended to apply the free acids themselves in their 100% form to the skin.

Processing

LANOLIN FATTY ACIDS are relatively easy to melt, and are highly compatible with other fatty acids oils, fats and waxes. This product should not be held at a high temperature for long periods, otherwise the acid value may fall significantly as a result of lactone formation. Storage should be in closed containers in a cool place.

Solubility at room temperature

Water: insoluble; mineral oil: partially soluble; acetone: partially soluble; ethanol: partially soluble; isopropyl myristate: partially soluble.

Specifications

Colour, Gardner	12 max. (bleached) 18 min. (unbleached)
Acid Value, mgKOH/g	120-155
Saponification Value, mgKOH/g	150 min.
Iodine Value	12 max. (bleached)
Melting Point, °C	50-65
Ash, %	0.15 max.
Loss On Drying, %	1.0 max.
Unsaponifiable matter, %	12 max. (bleached)

Packaging sizes	180 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Woolgrease Fatty Acids

High Acid Grease

Composition and Description

WOOLGREASE FATTY ACIDS are produced from the chemical treatment of woolgrease, a natural and renewable raw material that is obtained from the scouring (washing) of raw wool.

It is a highly complex mixture of semi-refined woolgrease and fatty acids. Chemically, it is a wax and a complex mixture of esters, di-esters and hydroxyl esters of lanolin alcohols, with high molecular weight lanolin acids.

Features

WOOLGREASE FATTY ACIDS, also known as high acid wool grease, differ from lanolin fatty acids, among others, by their low acid value. This makes them suitable for use with materials that are susceptible to acids. **WOOLGREASE FATTY ACIDS** are the perfect choice for technical applications, where lanolin and neutral wool grease are not cost-efficient.

Applications

WOOLGREASE FATTY ACIDS are a versatile raw material for use in rust preventatives, greases, lubricants, cutting fluids, dewatering chemicals, leather processing and others. **WOOLGREASE FATTY ACIDS** serve as a better rust preventative than petroleum, because of their higher affinity to metal surfaces. After heating, **WOOLGREASE FATTY ACIDS** can be easily applied to surfaces and form a flexible but resistant film after cooling. In particular, the metal soaps of wool grease fatty acids, e.g., calcium and magnesium, are long resisting and efficient lubricants.

Safety

WOOLGREASE FATTY ACIDS occur in nature and are biodegradable. This renders them suitable for technical applications where their release back into nature cannot be avoided, e.g., rust-preventatives for ships and cars.

Processing

WOOLGREASE FATTY ACIDS are easy to use and can be processed in both cold and melted forms. They are non-hazardous and melt easily, with relatively low volatility.



Specifications

Appearance	Brown, waxy solid
Acid Value, mgKOH/g	25-40
Saponification Value, mgKOH/g	100-130
Iodine Value	18-36
Melting Point, °C	42 min.
Ash, %	0.5 max.
Loss On Drying, %	1.0 max.

Packaging sizes	170 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

PEG-30 Lanolin

Ethoxylated Lanolin

Composition and Description

PEG-30 LANOLIN is a polyoxyethylene condensate with an average chain length of 30 ethylene oxide units. It has an average molecular weight of about 1.990 Da. The complex chemical composition of **PEG-30 LANOLIN** includes the natural lanolin esters and free hydroxyl groups, and the ether polymer chain. It is a soft, golden yellow wax with weak fruity odour.

Features

PEG-30 LANOLIN is a special product because it is completely soluble in water. The addition of ethylene oxide is kept to a minimum level, so as to keep the content of lanolin as high as possible. Although it is completely water-soluble, concentrated solutions might show slight opalescence at room temperature. This insolubility is reversible upon cooling.



Applications

PEG-30 LANOLIN is a non-ionic detergent with manifold applications for emulsifying, solubilising, moisturising and cleaning without negative effects on the skin. It is used for hair setting and as plasticiser in shampoos, cleansing lotions, hand creams, detergent formulations and creams. It is also used for superfatting of soaps. The addition of cetyl alcohol or cetostearyl alcohol can increase both foam and stability of emulsion of products prepared with **PEG-30 LANOLIN**.

Dermatology

PEG-30 LANOLIN can be considered as an intermediate product between the pharmaceutical lanolin and PEG-75 lanolin. Both products have well-established use in cosmetic and pharmaceutical applications without any negative incidents on skin. **PEG-30 LANOLIN** has been used for more than 20 years and no harmful skin reactions during manufacturing and use have been observed.

Processing

When used in solutions, **PEG-30 LANOLIN** should first be melted, followed by addition of 3 times the amount of hot water under constant stirring. The resulting concentrate is then diluted with either hot or cold water. In order to prepare emulsions, **PEG-30 LANOLIN** is normally melted together with the oil phase, but it can also be dissolved in the aqueous phase. It should be stored cool in closed containers. Prolonged heating above 80 °C should be avoided.

Solubility at room temperature

Water: soluble; ethanol, anhydrous: not soluble; ethanol 80%: partly soluble; ethanol 40%: soluble; mineral oil: slightly soluble

Specifications

Appearance	Amber coloured, waxy flakes
Acid Value, mgKOH/g	5.0 max.
Saponification Value, mgKOH/g	20 max.
pH 5% Aqueous Solution	3.5-8.0
Loss On Drying, %	0.5 max.

Packaging sizes	20 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

PEG-75 Lanolin

Ethoxylated Lanolin

Composition and Description

PEG-75 LANOLIN is a polyoxyethylene condensate with the best pharmaceutical lanolin. It has a mean chain length of 75 ethylene oxide units and an average molecular weight of about 3.970 Da. The lanolin content in **PEG-75 LANOLIN** is approximately 17%. It is a hard, pale yellow wax with weak fruity odour.



Features

PEG-75 LANOLIN is ethoxylated, to obtain not only complete water solubility, but also solutions that are crystal clear in all concentrations, both in water and in aqueous ethanol concentrations of up to 40%. The solutions are nonionic and compatible with most other solubilisers including up to 10% electrolytes solutions. The solution is only slightly affected by oxidative and reducing agents. It is stable in a pH range of 2-10. A particularly unique feature of **PEG-75 LANOLIN** is its carefully controlled manufacturing that ensures minimum viscosity variations of the aqueous solutions.

Applications

PEG-75 LANOLIN is particularly recommended for use in aqueous or aqueous-alcoholic lotions and solutions with high clarity. Moreover, the product has emulsifying, solubilising and emollient properties and a mild cleaning effect. Main applications include skin cleansing and after-shave lotions, as well as in shampoos and detergent formulations, where viscosity is of importance.

Dermatology

PEG-75 LANOLIN is made from pharmaceutical grade lanolin, which complies to the European Pharmacopoeia. It is well established in the market for many years, especially for hair and skin care products. To date, no adverse effects were observed. Patch tests that were made with the 100 % substance in 11 subjects with daily dosing of 2-3 hours over a period of 4 weeks showed no adverse skin reaction.

Processing

When used in solutions, **PEG-75 LANOLIN** should first be melted, followed by addition of 3 times the amount of hot water under constant stirring. The resulting concentrate is then diluted with either hot or cold water. In order to prepare emulsions, **PEG-75 LANOLIN** is normally melted together with the oil phase, but it can also be dissolved in the aqueous phase. It should be stored cool in closed containers. Prolonged heating above 80 °C should be avoided.

Solubility at room temperature

Water: soluble; ethanol, anhydrous: soluble; ethanol 80%: partly soluble; ethanol 40%: soluble; mineral oil: slightly soluble

Specifications

Appearance	Amber coloured, waxy flakes
Acid Value, mgKOH/g	5.0 max.
Saponification Value, mgKOH/g	20 max.
pH 5% Aqueous Solution	3.5-8.0
Loss On Drying, %	0.5 max.

Packaging sizes	20 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

PEG-75/50 Lanolin

50% Aqueous Solution of Ethoxylated Lanolin

Composition and Description

PEG-75/50 LANOLIN is a polyoxyethylene condensate with the best pharmaceutical lanolin. It has an average chain length of 75 ethylene oxide units and an average molecular weight of about 3.970 Da. The lanolin content in PEG-75/50 LANOLIN is approximately 9%. It is a pale yellow, clear liquid, which can be directly incorporated into cosmetic formulations without further processing.

Features

PEG-75/50 LANOLIN is nonionic and compatible with most other solubilisers including up to 10% electrolytes solutions. The solution is only slightly affected by oxidative and reducing agents. It is stable in a pH range of 2-10. A particularly unique feature of PEG-75/50 LANOLIN is its carefully controlled manufacturing that ensures minimum viscosity variations of the aqueous solutions.

Applications

PEG-75/50 LANOLIN is particularly recommended for use in aqueous or aqueous-alcoholic lotions and solutions with high clarity. Moreover, the product has emulsifying, solubilising and emollient properties and a mild cleaning effect. Main applications include skin cleansing and after-shave lotions, as well as in shampoos and detergent formulations, where viscosity is of importance.

Dermatology

PEG-75/50 LANOLIN is made from pharmaceutical grade lanolin that complies to the European Pharmacopoeia. It is well established in the market for many years, especially for hair and skin care products. To date, no adverse effects were observed. Patch tests that were made with the 100 % PEG-75 LANOLIN in 11 subjects with daily dosing of 2-3 hours over a period of 4 weeks showed no adverse skin reaction.

Processing

PEG-75/50 LANOLIN is an aqueous solution and can be used directly without any further processing steps. It should be stored cool in closed containers. Prolonged heating above 80 °C should be avoided.



Specifications

Appearance	Amber, yellow liquid
Colour, Gardner	7 max.
Water	47%-53%
pH 5% Aqueous Solution	3.5-7.0
Density (20 °C), g/ml	1.05-1.09

Packaging sizes	200 kg, 1000 kg
Shelf life	1 year
Storage	Tightly closed, at ambient temperature

Base SE

O/W Ointment Base - Mixture of PEG-30 Lanolin, Cetearyl Alcohol and Liquid Petroleum Oil

Composition and Description

BASE SE is a pale yellow, pearl-like shiny, oily O/W ointment base comprising of a well-balanced combination of ethoxylated lanolin derivatives with cetearyl alcohol and paraffin oil. **BASE SE** is extremely hydrophilic and after addition of water, a stable, non-ionic O/W emulsion is obtained. Each batch is strictly controlled to ensure, among other things, a constant viscosity of the emulsions. **BASE SE** has a very slight characteristic odour.

Features

The product **BASE SE** is a pioneer of a new generation self-emulsifying bases for cosmetics and pharmaceuticals. It is not only an emulsifying wax, but it also contains all the essential ingredients for a multi-purpose cream: emulsifiers, plasticisers and lubricants with light cleaning properties. Furthermore, the consistency of emulsions prepared with **BASE SE** can be easily adjusted between a solid ointment to a thin lotion simply by varying the water content.

Applications

BASE SE is a multi-purpose cream base for a wide range of cosmetic products, including hair and skin creams, etc. It is compatible with most cosmetic ingredients, even with oxidising agents that are used, for example, in formulations of permanent hair waves products. In compact powder, **BASE SE** is a hydrophobic binder that facilitates the use of pads on wetted skin. It can be used as a unique, liquid, water-free skin cleanser. In both hospitals and pharmacies, **BASE SE** is used as an excellent carrier for therapeutically active substances.

Dermatology

BASE SE contains only ingredients that are considered to be dermatologically safe. For more than 20 years of manufacturing and application, no irritating effects on skin were reported. Tests of acute

oral toxicity reflect an extremely low toxicity.

Processing

To produce O/W emulsions, hot water is added to **BASE SE** under stirring condition until it is melted and a dispersion is obtained. Subsequently, the mixture is cooled below 40 °C. Homogenisation is not always necessary, but recommended when white-colored liquid emulsion is desired. When processing large amounts, it is first recommended to melt **BASE SE**. Lipophilic additives should be melted together with **BASE SE** before the addition of water. **BASE SE** should be kept cool. When there is excess melted material that is not completely utilised, the content should be thoroughly mixed before it is used again. **BASE SE** has a shelf life under normal storage conditions for at least 2 years.

Solubility at room temperature

Water: partially soluble; acetone: partially soluble; ethanol, anhydrous: partially soluble; isopropanol anhydrous: partially soluble; isopropyl myristate: partially soluble

Specifications

Appearance	Pale yellow coloured, waxy paste
Acid Value, mgKOH/g	1.5 max.
Saponification Value, mgKOH/g	24 max.
Drop Point, °C	30-40
Loss On Drying, %	0.2 max.
Ash, %	0.2 max.

Packaging sizes	20 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Liquid Absorption Base (LAB)

Multisterol Base - Mixture of Lanolin Alcohol, Liquid Petroleum Oil and Octyldodecanol

Composition and Description

LIQUID ABSORPTION BASE is a liquid mixture of lanolin alcohols in paraffin oil of low viscosity that is separated by cooling and filtration of sedimenting components.

Features

LIQUID ABSORPTION BASE is a pharmaceutical grade lanolin alcohol that is easily processable in its liquid form. It is clear, almost colourless and odourless, absorbs quickly into the stratum corneum and has strong emulsifying and moisturising properties. It is a surface-active, non-ionic W/O emulsifier and results in emulsions that tolerate a wide pH range and high electrolyte concentrations.

Applications

The solubility and clarity of **LIQUID ABSORPTION BASE** are especially desirable in non-aqueous, liquid skin or hair products such as bath, baby and sunscreen oils, as well as in liquid brilliantines. **LIQUID ABSORPTION BASE** is also particularly useful as co-emulsifier, which can give O/W- and W/O-creams, such as cleansing and moisturising creams. It also gives a beautiful and smooth structure to pigmented makeups.

Dermatology

Tests carried out with 100% substance in accordance with the FDA criteria showed no eye irritation. No adverse reactions in humans have been observed during manufacturing or in the application of the product for over 25 years. Tests of acute oral toxicity in rats showed a LD50, which was larger than the maximum administered dose of 16 ml/kg for acetylated lanolin alcohols.

Processing

LIQUID ABSORPTION BASE has a low viscosity and is therefore easy to handle. Turbidity or sedimentation, which might form after storage at lower temperatures, can be easily removed by

heating and stirring. Prolonged heating especially at temperatures above 80 °C should be avoided. **LIQUID ABSORPTION BASE** should be kept cool in well-sealed containers. It is stable under normal storage conditions for at least 2 years.

Solubility at room temperature

Water: none; acetone: partially soluble; ethanol, anhydrous: partially soluble; isopropanol anhydrous: not soluble; mineral oil: soluble; isopropyl myristate: soluble



Specifications

Colour, Gardner	9 max.
Acid Value, mgKOH/g	1.0 max.
Saponification Value, mgKOH/g	2.0 max.
Hydroxyl Value, mgKOH/g	10-15
Iodine Value	12 max.
Loss On Drying, %	0.2 max.
Density (25 °C), g/ml	0.840-0.870

Packaging sizes	20 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Liquid Lanolin/ IPP

Lanolin Oil with Isopropyl Palmitate

Composition and Description

LIQUID LANOLIN/ IPP contains liquid lanolin esters as its main component. The physical properties are adjusted by addition of liquid fatty alcohols and esters of long chain fatty acids. **LIQUID LANOLIN/ IPP** is a clear, pale yellow liquid with low viscosity and a faint characteristic odour.

Features

LIQUID LANOLIN/ IPP offers a possibility to use the natural lanolin esters in the form of a low-viscosity liquid with a very low cloud point and melting temperature. **LIQUID LANOLIN/ IPP** absorbs quickly through the skin. It is a good emollient and leaves no greasy feeling on the skin. The solubility in aerosol propellants is excellent and tends not to block the nozzles of the aerosol cans, even at low temperatures.

Applications

The broad solubility and compatibility range of **LIQUID LANOLIN/ IPP** makes the product extremely suitable for fast and easy incorporation as a moisture agent in bath oils, skin lotions, sunscreen oils, etc. Especially for the latter application the hydrophobic properties of the material are beneficial. **LIQUID LANOLIN/ IPP** is also a suitable plasticiser for film-forming resin in hair sprays and as an additive in nail varnish removers, in order to prevent chapping of the nails.

Dermatology

All components of **LIQUID LANOLIN/ IPP** are classified as dermatologically safe.

Processing

LIQUID LANOLIN/ IPP is easy to handle and dissolves at room temperature in other oils without heating. It can tolerate temperatures up to 80 °C during the manufacturing process. However, high temperatures over an extended period of time should be avoided. **LIQUID LANOLIN/ IPP** should be stored in a cool, dry place in closed containers.



Solubility at room temperature

Water: none; acetone: soluble; ethanol, anhydrous: not soluble; isopropanol anhydrous: not soluble; mineral oil: soluble; isopropyl myristate: soluble

Specifications

Appearance	Clear, yellow, mobile liquid
Colour, Gardner	7 max.
Acid Value, mgKOH/g	2.0 max.
Saponification Value, mgKOH/g	145-165
Iodine Value	12-25
Cloud Point, °C	13 max.

Packaging sizes	50 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Cholesterol EP/ NF

Cholesterol

Composition and Description

CHOLESTEROL EP/NF is an almost odourless white powder that is derived from woolgrease, a by-product of wool scouring (washing). The woolgrease is subjected to alkaline hydrolysis that yields lanolin alcohol, from which the cholesterol is extracted.

Cholesterol is an essential part of all animal cell membranes and helps to maintain the functionality of the cell and keeps the cell membrane fluid and intact. In addition, it is an important precursor of steroidal hormones such as oestradiol and cortisol, of bile salts and of vitamin D.

Features

CHOLESTEROL EP/NF fully meets the requirements of the United States National Formulary and the European Pharmacopoeia at a minimum of 95% purity. **CHOLESTEROL EP/NF** exhibits good powder flowability. Upon request, the flowability can be further improved by the addition of a glidant-like highly-dispersed silicon dioxide.

Applications

CHOLESTEROL EP/NF is the chosen grade for pharmaceutical manufacturing that includes vitamin D3, steroid hormones and cholesterol esters. Cholesterol is a major component in lanolin and lanolin alcohol, and provides its water absorption capacity. The pure substance has a HLB of 2.7 and is often used in combination with other emulsifiers to obtain w/o emulsions, or as a co-emulsifier for o/w emulsions. Cholesterol adds texture to cosmetic formulations like creams and lotions. Generally, it is used in a range of 0.1% to 1.0% in cosmetics, but up to 5% cholesterol can be used to obtain rich formulations. **CHOLESTEROL EP/NF** can also be used for the stabilisation of liposomes intended for oral or topical use.

Dermatology

Cholesterol is a natural component of skin surface lipids and sebum and is generally considered to be safe. Cholesterol is used in many different cosmetic

and pharmaceutical topical preparations. It is described as not being or only slightly irritating on skin and is in concentrations below 1% particularly well-tolerated.

Cholesterol has emollient activity and can reduce water loss from the skin. Moreover, it increases skin penetration of pharmaceutical and cosmetic formulations.

Processing

CHOLESTEROL EP/NF is a stable product with a high melting (approx. 148 °C) and boiling (approx. 360 °C) point. Oxidation of the hydroxyl group may occur by exposure to high temperatures (180 °C) over an extended period (24 h).

Solubility at room temperature

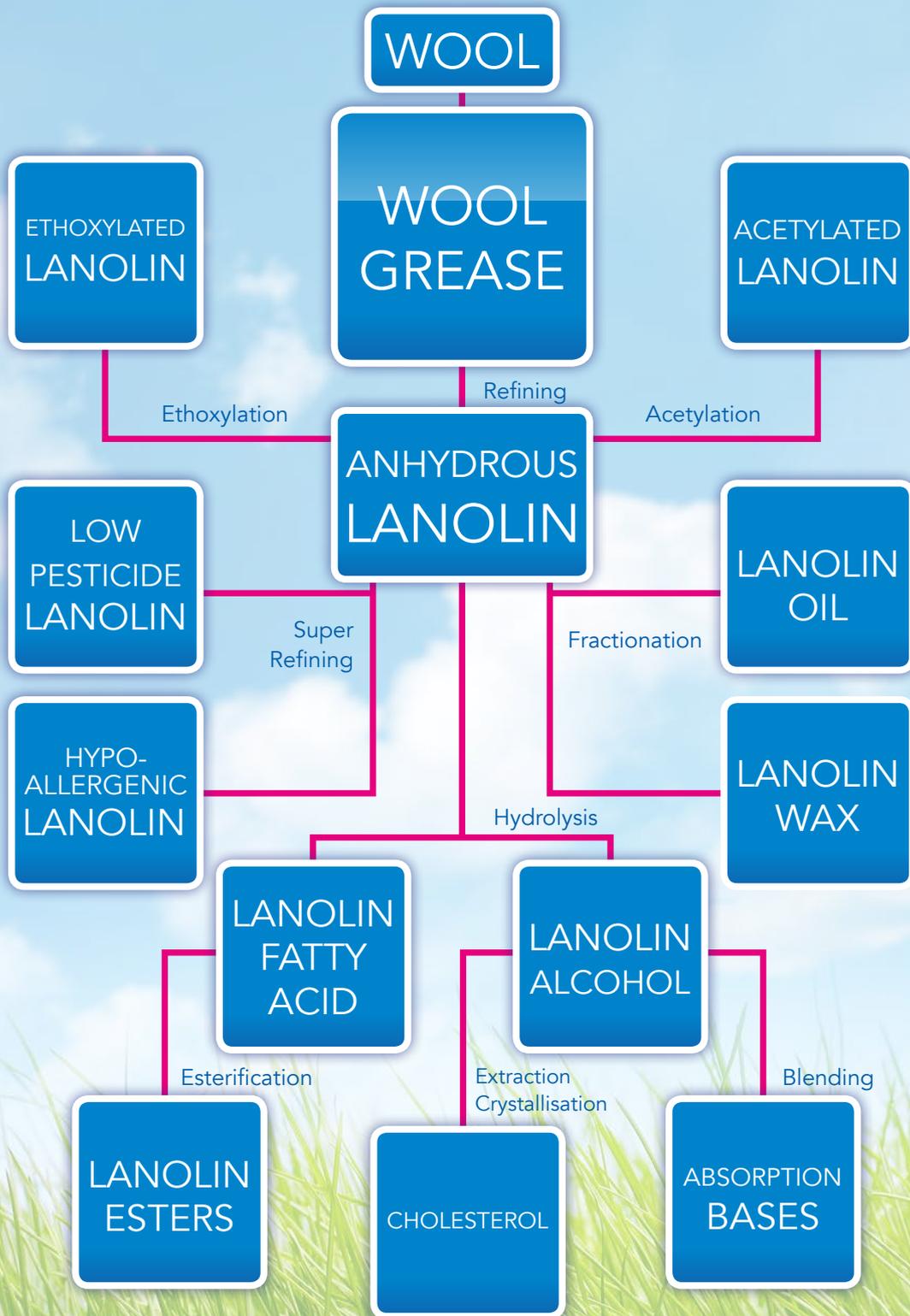
Water: insoluble; olive oil: sparingly soluble; ethanol: slightly soluble

Specifications

Identification	Complies
Melting Point, °C	147-150
Spec. Rot. in 2% w/v in Dioxane	(-)-34 - (-)38
Acidity, ml	0.3 max.
Residue on Ignition, %	0.1 max.
Loss on Drying, %	0.3 max.
Purity, % (G.C.)	95 min.
Solubility	Soluble in Acetic Acid, Acetone, Alcohol, Benzene, Chloroform, Dioxane, Ether, Ethyl Acetate, Hexane, Pyridine, Toluene and Vegetable Oils. Insoluble in Water.

Packaging sizes	50 kg
Shelf life	2 years
Storage	Tightly closed, at ambient temperature

Flow Chart



DEUTSCHE LANOLIN GESELLSCHAFT

Your Reliable Partner

Tradition in Progress

The DEUTSCHE LANOLIN GESELLSCHAFT is entirely specialised in trading with lanolin and its derivatives. We have collected a wealth of experience over the decades about the many benefits and uses of lanolin, which we would like to share with our customers and prospects. We consider ourselves as a long-term and reliable partner and are always committed to highest level of quality.



DEUTSCHE LANOLIN GESELLSCHAFT
Parmentier GmbH & Co. KG

