



KOSTER  
KEUNEN

S I N C E 1 8 5 2

W A X E S





ONE OF THE WORLD'S LEADING  
PROCESSORS, REFINERS AND  
MARKETERS OF HIGH QUALITY  
NATURAL WAXES

# KOSTER KEUNEN

## HISTORY AND PROFILE

• SINCE 1852 •

Koster Keunen Holland was founded as a family business in 1852 by Johanna Keunen and Bernhard Koster. Prime user of refined beeswax at the time was the candle industry. In the early days bleaching beeswax was a seasonal task because the only available method was exposing beeswax to sunlight in large open fields.

While at first beeswax was mainly used for candles, at the start of 20th century pharmaceuticals, food and especially cosmetics became important markets for beeswax. In 1930 Koster Keunen LLC was founded in Sayville, N.Y. to supply the American market and a second home base for the company was established. In 1973 a new modern factory site was established in Bladel to better serve the ever-increasing customer base, especially for specialty products for the cosmetic industry.

Currently, Koster Keunen is one of the world's leading processors, refiners and marketers of natural waxes. It is specialized in processing, formulating and marketing quality waxes to the cosmetic, pharmaceutical, candle and food industry and to other manufacturers worldwide. From its two facilities Koster Keunen processes and markets a greatly expanded line of waxes, wax derivatives and synthetic waxes which contribute to the high quality of literally thousands of products.





EXTENSIVE KNOWLEDGE  
OF WAXES AND SCIENTIFIC  
EXPERIENCE IN DEVELOPING  
NEW PRODUCTS



# KOSTER KEUNEN

## CREATOR AND PRODUCER OF QUALITY WAXES

**Koster Keunen Holland produces according to ISO 22716: 2007 / Cosmetics Good Manufacturing Practice (cGMP) and has been certified for its production site in 2013. This certification covers production of natural and synthetic waxes for the cosmetic, pharmaceutical, food, feed, ink and candle industries**

From beeswax, the foundation of the business and one of our principal products, Koster Keunen has developed a variety of new products to meet new and constantly evolving client requirements. In the area of natural waxes, beeswax derivatives have been created, such as BW Ester BW67, Cera Bellina as well as siliconyl beeswax and PEG-8 beeswax.

Specialty synthetic waxes are Kester (**Koster ester**) waxes such as K80H, K82P and K30G, inspired by our unique knowledge of the composition of beeswax. Vegetable waxes include carnauba wax, candelilla wax and several composites. Orange wax, sunflower wax and flower waxes have been added to our natural wax portfolio.

Koster Keunen's strength is its extensive knowledge of waxes and scientific experience in developing new products. By working closely together with our customers' R&D departments as well as formulators we enable our clients to create unique formulas with strong added value in its end product properties.



# KOSTER KEUNEN WAX COLLECTION

**BEESWAX**  
(White, Light Yellow, Yellow)

**CARNAUBA WAX T1**

**CANDELILLA WAX**

**DESCRIPTION:**

GENERAL INFORMATION	GENERAL INFORMATION	GENERAL INFORMATION
This natural animal wax is a complex mixture of ca. 70 % non-glyceride esters (C38->C62), ca. 12-15 % fatty acids (C16-C36) and ca. 12-16 % paraffinic hydrocarbons (C21-C35) Beeswax can be used in the entire range of cosmetic products, for example in W/O and O/W formulations, sticks, salves, make-up, hair care products.	Carnauba wax is obtained from the leaves of a palm tree named Copernicia cerifera, indigenous to northern Brasil. The wax protects the plant against the environment and prevents excessive evaporation. Carnauba wax consists mainly of esters (ca. 85 %), free long chain fatty alcohols (ca. 13 %), and free fatty acids and resins. This very hard natural wax is mainly used in cosmetic and pharmaceutical stick formulations.	Candelilla wax is obtained from a shrub named Euphorbia Cerifera, indigenous to northern Mexico. The wax protects the plant against the environment and prevents excessive evaporation. Candelilla wax consists of hydrocarbons (ca. 50 %, C29-C33, mainly C31), esters, phytosterols, free fatty acids, free fatty alcohols and resins. This hard vegetable wax is mainly used for cosmetic and pharmaceutical stick products. It is also suitable for W/O emulsions.

**APPLICATIONS:**

Creams, lotions, sticks, sun care, make-up, hair care, food (glazing or release agent)	Sticks, make-up, mascara, decorative cosmetics, sun care, food	Lipsticks, Lipbalms, decorative cosmetics, emulsions, food
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**ADVANTAGES:**

High binding strength, pronounced plasticity, excellent emulsifiability, relatively low melting point, highly occlusive character. Sticks: improves structure, oil retention, firmness, adhesion, pay-off and mould release. Emulsions: consistency regulator and optional (co-)emulsifier contributing to skin feel, emolliency, barrier function and appearance.	It provides good mould release, hardness, consistency, surface gloss and ease of application. Because carnauba wax has the highest melting point among the natural waxes it is suitable for improving the temperature stability of many cosmetic products.	Candelilla wax has extraordinary oil binding properties, improving the stability and texture of cosmetic products. Sticks: provides good mould release, firmness, surface gloss and improves softening point. Often used in combination with carnauba wax, beeswax and other waxes to improve skin feel, adhesion and pay-off properties.
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**REGULATORY**

INCI: Cera Alba

**REGULATORY**

Copernicia Cerifera Cera

**REGULATORY**

Candelilla Cera

CAS: 8012-89-3

8015-86-9

8006-44-8

HS/TARIFF CODE: 15219099

15211000

15211000

FOOD ADDITIVE: E901, GRAS, INS 901

E903, GRAS, INS903

E902(EU), GRAS , INS 902

EUROPEAN PHARMA COPIEIA: Complies

Complies

Complies

REACH: Annex V exempt

Annex V exempt

Annex V exempt

GMO: Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

**ANIMAL TESTS:**

Not tested on animals

Not tested on animals

Not tested on animals

**BSE/TSE:**

BSE/TSE free

BSE/TSE free

BSE/TSE free

**ALLERGEN FRAGRANCES:**

Not present

Not present

max. 50 - 200 ppm Benzyl alcohol

**SPECIFIC PRODUCT DATA**

AVAILABLE PRODUCT FORM: Pastilles (white&yellow), Granulate (white&light yellow), Slabs (white&yellow)

**SPECIFIC PRODUCT DATA**

Flakes

**SPECIFIC PRODUCT DATA**

Pastilles (20 kg flakes)

PACKAGING: 20 kg bags

25 kg bag

25 kg bag

PALLET SIZE: 500 kg

500 kg

500 kg

CONGEALING POINT (°C) 61 - 65

Approx. 82

Approx. 69

ACID VALUE (MG KOH/G) 17 - 24

2 - 7

12 - 22

## SUNFLOWER WAX

## ORANGE PEEL WAX

## LEMON PEEL WAX

## RICE BRAN WAX

## GENERAL INFORMATION

Sunflower seed wax is a new, hard, crystalline, high melting vegetable wax obtained from winterization of sunflower oil. It consists of very long chain saturated C42-C60 esters derived from C20-C32 fatty alcohols and C20-C28 fatty acids. Sunflower wax functions as a consistency component in sticks and emulsions (W/O - and O/W).

Lipsticks, lip balms , mascara and other decorative cosmetics, emulsions

Thickening, improving oil binding, emolliency, film formation and lubricity. Contributes to hardness, texture, strength and mould release. Alternative for rice bran, carnauba and candelilla wax and a natural alternative for mineral waxes. Exceptional oil gelling properties in very small wax concentrations. Interesting wax to use in emulsions; creating new textures.

## REGULATORY

Helianthus Annuus Seed Wax (Cosing: Cera)

999999-99-4

15211000

-

-

Annex V exempt

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals

BSE/TSE free

Not present

## SPECIFIC PRODUCT DATA

Granulate

20 kg bag

500 kg

74 - 77

< 8

## GENERAL INFORMATION

Orange peel wax is a soft orange vegetable wax obtained from the rind of the orange fruit. Composition and consistency are similar to lanolin.

Orange peel wax consists of a complex mixture of special esters, free fatty acids, hydrocarbons, free phytosterols and free alcohols. Minor components in this wax are well known for their anti-oxidant, anti-inflammatory, anti-microbial and sunscreen properties.

Hair care, skin care, sticks

Orange peel wax is an emollient wax with excellent skin feel, enhancing SPF, contributing to the barrier function and moisture regulation. It offers similar protection to the human skin and hair as it does to the fruit. The phytosterols in orange peel wax act as co-emulsifiers aiding emulsion stability. Hair care: this wax contributes to conditioning and is extraordinarily substantive.

## REGULATORY

Citrus Aurantium Dulcis Peel Cera

8028-48-6

15211000

-

-

Annex V exempt

Free of genetically modified organisms (GMO) and complies with EC regulations No1829/2003 and 1830/2003

Not tested on animals

BSE/TSE free

max. 900ppm d-limonene (INCI=LIMONENE)

## SPECIFIC PRODUCT DATA

Solid

20 kg pail

n/a

30 - 55

10 - 30

## GENERAL INFORMATION

Lemon peel wax is a hard yellow wax obtained from the rind of the lemon fruit after separation from lemon essential oils and lemon terpenes. It consists of a complex mixture of special esters, free fatty acids, hydrocarbons, free sterols, free fatty aldehydes and free alcohols. The phytosterols in lemon peel wax act as coemulsifiers aiding emulsion stability. Because it contains a small amount of essential oil this natural wax retains the beautiful fragrance of lemon essential oil.

Emulsions, hair care, sticks

Lemon peel wax is an emollient wax with excellent skin feel, contributing to barrier function and moisture regulation, offering similar protection to the human skin and hair as it does to the fruit.

## REGULATORY

Citrus Medica Limonum Peel Extract

92346-89-9

15211000

-

-

Annex V exempt

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals

BSE/TSE free

5500-8300ppm d-limonene (INCI=LIMONENE)

## SPECIFIC PRODUCT DATA

Solid

20 kg pail

n/a

Approx. 62

15 - 30

## GENERAL INFORMATION

Rice bran wax is a hard, crystalline, high melting vegetable wax obtained from rice husks. It consists of very long chain saturated C46-C62 esters from C20-C36 fatty alcohols and C20-C26 fatty acids. Rice bran wax functions as a consistency component in sticks and emulsions (W/O- and O/W).

Lipsticks and lipbalms, mascara and other decorative cosmetics, emulsions

In sticks rice bran wax contributes to hardness, texture, strength and mould release. Rice bran wax can be used as a (partial) substitute for carnauba and candelilla wax in many formulations. It has exceptional oil gelling properties in relatively small concentrations. Interesting wax to use in emulsions; creating new textures.

## REGULATORY

Oryza Sativa Cera

8016-60-2

15211000

FDA §172.890, 172.615

-

Annex V exempt

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals

BSE/TSE free

Not present

## SPECIFIC PRODUCT DATA

Pastilles

20 kg bag in carton

500 kg

Approx. 81

< 13

# KOSTER KEUNEN WAX COLLECTION

## ROSE WAX

## BW ESTER BW67

## SILICONYL BEESWAX

### DESCRIPTION:

GENERAL INFORMATION	GENERAL INFORMATION	GENERAL INFORMATION
Rose essential oils obtained by extraction of Rose flowers are valued ingredients for the fragrance industry. Rose essential oil is produced from the flowers by hexane extraction. From this oil small quantities of essential waxes are obtained using ethanol.	In BW Ester BW67 the free fatty acids in beeswax have been converted to esters of similar chain lengths as already present in beeswax using natural, vegetable fatty alcohols (total ester fraction > 85 %). Elimination of the free fatty acids leads to improved oil retention and oil gelling properties and improved compatibility with cosmetic ingredients.	Siliconyl beeswax is the esterification product of beeswax with a high molecular weight silicone alcohol. By eliminating the free wax acids gelling and oil-binding properties have been much improved. The special character of Siliconyl Beeswax lies in the fact that advantages of beeswax and silicones have been combined into one product. With Siliconyl Beeswax the advantages of silicones can be easily incorporated into a formulation.

### APPLICATIONS:

Emulsions, decorative cosmetics, aromatherapy, creams, lotions, sticks	Sticks, emulsions, decorative cosmetics, mascara, foundation, make-up	Sticks, emulsions, decorative cosmetics, hair care, sun care
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### ADVANTAGES:

Rose Wax is a rubbery, medium hard wax of light yellow to green colour which retains the intense sweet floral fragrance of the essential oil. In its composition Rose Wax shows similarities with Candelilla Wax and other natural waxes, with about 85-90 % natural hydrocarbons (ca. C19-C39, esp. C19-C31 & C35) and about 10-15 % esters (ca. C38-C58, esp. C40-C48). This resemblance gives this product similar benefits.	Excellent oil-gelling and oil-retention abilities. Most cosmetic oils can be gelled, even volatile silicone oils. Stable and smooth gels with high gel strength in low wax concentrations. Improved emulsion stability and rheological properties. Performs well in stick formulations such as lipsticks and eye pencils and as consistency modifier in emulsions and liquid make-ups.	Improves skin feel and texture, film forming, SPF, gloss, reducing tackiness and greasiness. It suppresses crystallization behaviour of other waxes and aids in pigment dispersion. In emulsions it improves stability, rheology, barrier properties and contributes to lubrication and spreading. Sticks: contributes to texture, pay-off, lubricity. Hair care: improves conditioning, body and combing characteristics.
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### REGULATORY

INCI: Rosa Multiflora Flower Wax	REGULATORY Stearyl Beeswax (± 50%); Behenyl Beeswax (± 50%)	REGULATORY Bis-PEG-12 Dimethicone Beeswax
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CAS: 97593-51-6	144514-54-5	151661-97-1
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HS/TARIFF CODE: 15211000	34049000	34049000
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FOOD ADDITIVE: -	-	-
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EUROPEAN PHARMAOPOEIA: -	-	-
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REACH: Annex V.9 exempt	Polymer exempt	Polymer exempt
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GMO: Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003	Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003	Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003
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ANIMAL TESTS: Not tested on animals	Not tested on animals	Not tested on animals
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BSE/TSE: BSE/TSE free	BSE/TSE free	BSE/TSE free
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ALLERGEN FRAGRANCES: 640ppm Citronellol and 350ppm Geraniol	Not present	Not present
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### SPECIFIC PRODUCT DATA

AVAILABLE PRODUCT FORM: Solid	Granulate	Pastilles
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PACKAGING: 20 kg pail	20 kg bag	20 kg bag in carton
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PALLET SIZE: n/a	500 kg	n/a
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CONGEALING POINT (°C) 51 - 57	64 - 69	Approx. 66
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ACID VALUE (MG KOH/G) 3 - 7	< 3	< 4,5
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## CERA BELLINA

## PEG-12 CARNAUBA

## PEG-8 BEESWAX EU

## SILICONYL CANDELILLA

**GENERAL INFORMATION**

Cera Bellina is a polar beeswax derivative in which the free fatty acids of beeswax have been converted to polyglycerol esters. Elimination of the free fatty acids results in improved oil retention and oil gelling properties and to improved compatibility with cosmetic ingredients. Cera Bellina has the unique ability to form stable non-granular gels with most natural and synthetic oils.

Emulsions (all types), oil gels, decorative cosmetics, sun care

Cera Bellina functions as a dispersion aid for pigments, as well as mineral and polymer extenders. Its crystallisation inhibiting properties and tendency towards formation of liquid-crystalline like structures improve stability, rheology, structure, homogeneity and texture of many cosmetic products. Products with Cera Bellina show superb stability, smooth silky appearance and very pleasant skin feel.

**REGULATORY**

Polyglyceryl-3 Beeswax

136097-93-3

340910

-

-

Polymer exempt

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals

BSE/TSE free

Not present

**SPECIFIC PRODUCT DATA**

Granulate

20 kg bag

500 kg

Approx. 68

< 2

**GENERAL INFORMATION**

PEG-12 Carnauba is a polar carnauba wax derivative created by esterification of carnauba wax with polyethylene glycol. In this way the free fatty acids of carnauba are converted into polyethylene glycol esters. The introduction of polyethylene glycol groups imparts strong hydrophilic properties to carnauba wax. Esterification with polyethylene glycol not only improves emulsification properties but also compatibility, gelling properties and solubility.

Emulsions, sticks, gels, decorative cosmetics, hair care, sun care

This is a unique modified carnauba wax, resulting in greatly enhanced compatibilities. This wax opens up new ways to use carnauba in formulations not yet considered. Besides co-emulsifying properties, it introduces better film forming and pigment dispersion. Textures are less waxy. Stability, product homogeneity and slip are improved.

**REGULATORY**

PEG-12 Carnauba

8015-86-9/25322-68-3

34049000

-

-

Polymer exempt

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals

BSE/TSE free

Not present

**SPECIFIC PRODUCT DATA**

Pastilles

25 kg bag in carton

500 kg

Approx. 79

<2

**GENERAL INFORMATION**

PEG-8 Beeswax is a polar beeswax derivative created by esterification of beeswax with polyethylene glycol. In this way the free fatty acids of beeswax have been converted into polyethylene glycol esters. The introduction of polyethylene glycol groups imparts hydrophilic properties to beeswax. Elimination of the free fatty acids of beeswax leads to improved oil retention and oil gelling capabilities.

Emulsions, sticks, decorative cosmetics, hair care

This non-ionic, self-emulsifying wax acts as a co-emulsifier, improving stability, oil gelling, consistency, pigment dispersion and it reduces crystallisation. It improves product homogeneity, stability and moisturising properties and reduces occlusivity and tackiness. Stick: improves texture, pigment distribution and suppresses migration of lipid and colour ingredients. It allows very high oil contents in O/W formulations.

**REGULATORY**

PEG-8 Beeswax

8012-89-3/25322-68-3

34049010

-

-

Polymer exempt

Free of genetically modified 20 kg bag in carton  
500 kg  
Approx. 67  
< 5

Not tested on animals

BSE/TSE free

Not present

**SPECIFIC PRODUCT DATA**

Pastilles

20 kg bag in carton

500 kg

Approx. 70

< 3,5

**GENERAL INFORMATION**

Siliconyl Candelilla is the esterification product of candelilla wax with a high molecular weight silicone alcohol. The special character of Siliconyl Candelilla lies in the fact that advantages of candelilla and silicones have been combined into one product.

Sticks, emulsions, hair care, decorative cosmetics, sun care

In addition to the excellent gelling and oil binding properties of traditional candelilla wax, siliconyl candelilla provides new textures, better film forming and enhanced SPF, it improves pigment dispersion and reduces tackiness.

**REGULATORY**

Bis-PEG-12 Dimethicone Candelilla

210057-90-2

34049000

-

-

Polymer exempt

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals

BSE/TSE free

Max. 100 - 200 ppm Benzyl alcohol

**SPECIFIC PRODUCT DATA**

Pastilles

20 kg bag in carton

500 kg

Approx. 70

< 3,5



# KOSTER KEUNEN WAX COLLECTION

## KESTER WAX K82P

## KESTER WAX K80H

## KESTER WAX K82D

### DESCRIPTION:

GENERAL INFORMATION	GENERAL INFORMATION	GENERAL INFORMATION
This specialty wax is created to mimic the complex polyester fraction of beeswax, which gives beeswax its unique plastic properties. Kester Wax K82P contains a range of hydroxy polyesters with chain lengths between ca. 56 and 76 carbon atoms and is manufactured from natural fatty acids and synthetic fatty alcohols. Kester Wax K82P gels most cosmetic oils showing good oil retention.	This high melting very hard synthetic ester wax is a synthetic version of the monoester fraction of beeswax. Kester Wax K80H contains straight chain esters with chain lengths between ca. C38 and C68 and is manufactured from natural fatty acids and synthetic fatty alcohols. In melting point and hardness Kester Wax K80H is similar to carnauba wax and is capable of replacing that natural wax in many formulations.	Kester Wax K82D is the dimer acid ester of very long chain synthetic fatty alcohols. This specialty synthetic wax contains diesters with carbon chain lengths varying from ca C76 to over C116. Remarkable is the combination of a high melting point with plasticity above ca. 55 °C, although relatively hard at room temperature.

### APPLICATIONS:

Sticks, decorative cosmetics, emulsions, mascara, hair care, sun care	Sticks, decorative cosmetics, emulsions	Lip balms, lipsticks, antiperspirants, oil gels, mineral wax replacement
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### ADVANTAGES:

Kester Wax K82P improves texture, film forming, SPF, plasticity, adhesion, homogeneity, oil binding and ingredient distribution. It suppresses the crystallisation behaviour of other waxes. Because of its special plasticizing properties the proportion of hard waxes in a product can be increased. Its excellent compatibility with pigments allows high pigment percentages.	Kester Wax K80H has excellent oil-gelling capabilities and broad compatibility with lipid cosmetic ingredients. Most cosmetic oils (incl. some silicone oils and the polar oils) are gelled, giving high gel strength even at low wax concentrations. It improves the quality of sticks in high ambient temperatures. This wax functions as a consistency regulator and stabiliser in both W/O and O/W emulsions.	K82D has extraordinary strong gelling properties for vegetable oils. At surprisingly low concentrations it gives beautiful, glossy, silky, slightly transparent gels. Also several silicone oils can be gelled. It can replace mineral wax in many applications. Increasing wax concentration does not cause brittleness. With this wax, additional viscosity can be achieved independently from ingredients already used.
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### INCI:

REGULATORY	REGULATORY	REGULATORY
Synthetic Beeswax	Synthetic Beeswax	Di-C20-40 Alkyl Dimer Dilinoleate

### CAS:

71243-51-1	71243-51-1	68476-00-6
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### HS/TARIFF CODE:

34049000	34049000	34049000
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### FOOD ADDITIVE:

-	-	-
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### EUROPEAN PHARMAOPOEIA:

-	-	-
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### REACH:

Polymer exempt	Polymer exempt	Polymer exempt
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### GMO:

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003	Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003	Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003
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### ANIMAL TESTS:

Not tested on animals	Not tested on animals	Not tested on animals
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### BSE/TSE:

BSE/TSE free	BSE/TSE free	BSE/TSE free
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### ALLERGEN FRAGRANCES:

Not present	Not present	Not present
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### SPECIFIC PRODUCT DATA

### AVAILABLE PRODUCT FORM:

Slabs	Granulate	Pastilles
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### PACKAGING:

5 kg slab (approx)	20 kg bag	20 kg bag
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### PALLET SIZE:

600 kg (approx)	500 kg	500 kg
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### CONGEALING POINT (°C)

78 - 84	79 - 84	78 - 84
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### ACID VALUE (MG KOH/G)

< 5	< 3	< 5
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**KESTER WAX K30G**

**KESTER WAX K62**

**PERMULGIN 3230**  
Ozokerite

**PERMULGIN 3233**  
Colipa compliant  
Ozokerite

**GENERAL INFORMATION**

Kester Wax K30G is a unique very low melting, hard and brittle, powdery wax. It is manufactured by esterification of a special long chain guerbet alcohol with vegetable fatty acids. This synthetic specialty wax remarkably combines hardness and a high molecular weight with a melting point just below body temperature. Its molecules have a remarkable star-like shape consisting of three outward directed alkyl chains of similar length with the ester bond located in the center of the molecule.

Sticks, decorative cosmetics, mascara, emulsions.

Kester Wax K30G improves the sensory properties of formulations giving a silicon-like feel. Due to its low melting point this emollient wax melts on the skin. It also contributes to lubricity and improves the spread and slip properties of a formulation, while reducing greasiness, stickiness and occlusivity.

**REGULATORY**

Tetradecyloctadecyl Stearate

68201-22-9  
34049000

-  
-

Polymer exempt  
Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals  
BSE/TSE free  
Not present

**SPECIFIC PRODUCT DATA**

Solid

20 kg pail  
n/a  
28 - 33  
< 3

**GENERAL INFORMATION**

This synthetic ester wax is the esterification product of long chain saturated fatty alcohols and acids, both of vegetable origin. It contains esters with carbon chain lengths between ca. C32-C46, especially C36-C44. Kester Wax K62 strongly resembles Hydrogenated Jojoba Oil and Synthetic Spermaceti (also called Cetyl Palmitate or Cetyl Esters Wax).

Sticks, hair care, skin care, mascara

Kester Wax K62 functions as a consistency component in sticks and emulsions (W/O and O/W). In both it thickens the formulation by providing a rigid structural network of wax crystals, improving oil binding, emolliency, film formation, gloss and lubricity. It strongly reduces the greasy feel of oils and contributes to texture, strength, break resistance, pay-off and mould release characteristics. This wax is a good alternative for Jojoba wax.

**REGULATORY**

Cetearyl Behenate

92797-30-3  
34049000

-  
-

Polymer exempt  
Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals  
BSE/TSE free  
Not present

**SPECIFIC PRODUCT DATA**

Granulate

20 kg bag  
500 kg  
60 - 65  
< 4

**GENERAL INFORMATION**

Permulgin 3230 is a mineral wax of the ozokerite type consisting of paraffinic and naphthenic hydrocarbons ca. C20-C70.

Sticks, emulsions, salves

In stick formulations Permulin 3230 functions as a oil gellant and improves: hardness, break resistance, temperature stability, texture, oil binding. In emulsion formulations Permulin 3230 functions as a consistency regulator, improves emulsion stability and when used in combination with Castor Wax (Hydrogenated Castor Oil) suppresses crystallisation of this wax.

**REGULATORY**

Ozokerite

CAS 64742-51-4 and CAS 64742-60-5  
34049000

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Registered 31-11-2010  
Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals  
BSE/TSE free  
Not present

**SPECIFIC PRODUCT DATA**

Granulate

20 kg bag  
500 kg  
75 - 80  
< 0,1

**GENERAL INFORMATION**

Permulgin 3233 is a wax blend of the Ozokerite type. It fully complies to the COLIPA recommendation No. 14 (oral & lip care). Permulin 3233 is a mineral wax consisting of paraffinic, isoparaffinic and naphthalenic hydrocarbons with carbon chain lengths between ca. C25 and C80. Permulin 3233 combines the advantages of paraffin waxes and microcrystalline waxes.

Sticks, emulsions, salves

In combination with mineral and natural oils it produces a strong gel network with high capacity resulting in excellent oil-binding capabilities. In stick formulations Permulin 3233 functions as an oil gellant and improves texture, break resistance and temperature stability. Permulin 3233 decreases oil bleeding of lipsticks and other stick products.

**REGULATORY**

Ozokerite

Cas mix  
34049000

-  
-

Ingredients registered up supply chain  
Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Not tested on animals  
BSE/TSE free  
Not present

**SPECIFIC PRODUCT DATA**

Pastilles / Granulate

20 kg bag  
500 kg  
73-77  
< 0,1



**KOSTER  
KEUNEN**  
SINCE 1892

# KOSTER KEUNEN WAX COLLECTION

**PERMULGIN 3234**  
Colipa compliant  
Ozokerite

**PERMULGIN 3301**

**PERMULGIN 3310**

**DESCRIPTION:**

GENERAL INFORMATION	GENERAL INFORMATION	GENERAL INFORMATION
Permulgin 3234 is a wax blend of the Ozokerite type. It fully complies to the COLIPA recommendation No. 14 (oral & lip care). Permulin 3234 is a mineral wax consisting of paraffinic, isoparaffinic and naphthalenic hydrocarbons with carbon chain lengths between ca. C25 and C80. Permulin 3234 combines the advantages of paraffin waxes and microcrystalline waxes.	Permulgin 3301 (Synthetic Beeswax) is a wax mixture simulating the properties of natural beeswax. It consists of hydrocarbon waxes, vegetable fatty acid and hydrogenated vegetable oil. We also offer a non-animal version: Permulin 3301N.	Permulgin 3310 is an off-white wax consisting of a special blend of waxes with properties somewhat similar to beeswax.

**APPLICATIONS:**

Sticks, emulsions, salves	Creams, lotions, sticks, sun care, make-up, hair care, food (glazing or release agent)	Hair care, skin care, sticks, emulsions
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**ADVANTAGES:**

In combination with mineral and natural oils it produces a strong gel network with high capacity resulting in excellent oil-binding capabilities. In stick formulations Permulin 3234 functions as an oil gellant and improves texture, break resistance and temperature stability. Permulin 3234 decreases oil bleeding of lipsticks and other stick products.	Cost effective wax blend in times when natural Beeswax becomes too expensive for your formula.	It has excellent oil gelling and oil binding properties and contributes to gloss, emolliency, emulsion stability and ease of application. This wax is easily emulsified by saponification and gives rich, glossy and velvety creams.
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**INCI:**

REGULATORY	REGULATORY	REGULATORY
Ozokerite	Synthetic Beeswax	Synthetic Beeswax

**CAS:**

Cas mix	71243-51-1	71243-51-1
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**HS/TARIFF CODE:**

34049000	34049000	34049000
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**FOOD ADDITIVE:**

-	-	-
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**EUROPEAN PHARMAPOEIA:**

-	-	-
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**REACH:**

Ingredients registered up supply chain	Ingredients up supply chain	Ingredients up supply chain
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**GMO:**

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003	Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003	Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003
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**ANIMAL TESTS:**

Not tested on animals	Not tested on animals	Not tested on animals
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**BSE/TSE:**

BSE/TSE free	BSE/TSE free	BSE/TSE free
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**ALLERGEN FRAGRANCES:**

Not present	Not present	Not present
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**AVAILABLE PRODUCT FORM:**

SPECIFIC PRODUCT DATA	SPECIFIC PRODUCT DATA	SPECIFIC PRODUCT DATA
Pastilles / Granulate	Granulate	Granulate

**PACKAGING:**

20 kg bag	20 kg bag	20 kg bag
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**PALLET SIZE:**

500 kg	500 kg	500 kg
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**CONGEALING POINT (°C)**

79-84	61 - 65	72,5 - 76,5
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**ACID VALUE (MG KOH/G)**

< 0,1	17 - 24	10 - 18
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PERMULGIN 3500

PERMULGIN 4201

PERMULGIN 4202

**GENERAL INFORMATION**

Permulgin 3500 is a soft pharma-ceutical grade petrolatum wax which can be used for plastic fat phases and emulsions, especially of the W/O type. Permulgin 3500 is an occlusive emollient which contributes to moisturising and barrier properties and reduces transepidermal water loss.

**GENERAL INFORMATION**

Permulgin 4201 is a hydrogenated microcrystalline wax consisting of isoparaffinic and naphthenic hydrocarbons with carbon chain lengths of ca. C35-C70. Permulgin 4201 is a hard mineral wax of petroleum origin with excellent oil-binding and oil-gelling properties.

**GENERAL INFORMATION**

Permulgin 4202 is a hydrogenated microcrystalline wax consisting of isoparaffinic and naphthenic hydro-carbons with carbon chain lengths of ca. C35-C70. Permulgin 4202 is a softer mineral wax of petroleum origin with excellent oil-binding and oil-gelling properties.

Emulsions, salves, oil gels, hair care

Hair care, skin care, sticks, emulsions, food

Hair care, skin care, sticks, emulsions, food

Permulgin 3500 has excellent oil binding properties and contributes to the stability and consistency of W/O and O/W emulsions. Permulgin 3500 is also suitable for cold formulation purposes.

In stick formulations Permulgin 4201 functions as a binder and oil gellant and improves: hardness, break resistance, temperature stability, texture, oil binding. In emulsion formulations Permulgin 4201 functions as a consistency regulator, improves emulsion stability and when used in combination with Castor Wax (Hydrogenated Castor Oil) suppresses crystallisation of this wax.

In stick and ointment type formulations Permulgin 4202 functions as a binder and oil gellant and improves break resistance, texture, oil binding, hardness and temperature stability. In emulsion formulations Permulgin 4202 functions as a consistency regulator and improves emulsion stability and texture.

**REGULATORY**

Petrolatum

**REGULATORY**

Hydrogenated Microcrystalline Wax

**REGULATORY**

Hydrogenated Microcrystalline Wax

8009-03-8  
34049000

64742-60-5  
34049000  
E905

64742-60-5  
34049000  
E905

-  
Ingredients registered

-  
German DAC compliant  
30-11-2010 registered

-  
German DAC compliant  
30-11-2010 registered

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Free of genetically modified organisms (GMO) and complies with EC regulations No 1829/2003 and 1830/2003

Free of genetically modified organisms (GMO) and complies with EC regulations No1829/2003 and 1830/2003

Not tested on animals  
BSE/TSE free  
Not present

Not tested on animals  
BSE/TSE free  
Not present

Not tested on animals  
BSE/TSE free  
Not present

**SPECIFIC PRODUCT DATA**

Solid

**SPECIFIC PRODUCT DATA**

Granulate, slabs

**SPECIFIC PRODUCT DATA**

Granulate, slabs

180 kg drum / 70 kg drum  
n/a  
48 - 54  
< 0,1

20 kg bag / 23,75 kg carton  
500 kg, 570 kg  
84 - 88  
< 0,1

20 kg bag / 24,37 kg carton  
500 kg, 585 kg  
70 - 74  
< 0,1



OIL GELLING, BINDING, IMPROVING  
STABILITY, ADDING STRUCTURE



# KOSTER KEUNEN

## RESEARCH & DEVELOPMENT

Koster Keunen's strength is its extensive knowledge of waxes and scientific experience in developing new products. By working closely together with our customers' R&D departments as well as formulators we enable our clients to create unique formulas with strong added value in its end product properties.

From beeswax, Koster Keunen has developed a variety of new products to meet new and constantly evolving client requirements. Our most recent addition to our product portfolio is the KOSTER MILK collection; perfect to use in cold formulations. Our KESTER WAX K82P-VS shows softer and improved plasticizing properties that increase the formulation window for difficult mixtures (hard waxes / crystallization issues).

In April 2012, Koster Keunen Holland opened its new laboratory. In this modern facility our chemists continue their work in developing new, unique waxes. We gladly invite our customers to visit Bladel, and work with us to find the perfect (combination of) waxes for your formulas.



KOSTER KEUNEN MILKS: THE EASY WAY  
TO CREATE A 'LIGHT' CREAM WITH  
UNIQUE FILM FORMING PROPERTIES



# KOSTER KEUNEN

## MILKS

Our newly developed Koster Keunen Milks are sprayable, easy-to-use wax dispersions with a 40% wax content. A brand new patented emulsification technique allows us to produce small, spherical wax particles with a uniform particle size. This novel green technology gives us a flexible choice of emulsifiers - including food grade - using substantially less energy versus the traditional production methods.

Koster Keunen Milks' extraordinary film forming abilities (greatly) improve protective and sensory properties of sun, hair and skin care products. The enhanced, superior quality of the film formed on the skin or hair and the better distribution of ingredients not only boosts SPF, but also overall product performance.

### APPLICATIONS

Sun care, hair care, skin care, mascara, cold formulations

### INCI NAME

Water (aqua), WAX-INCI, Laureth-23, Glycerin, Trideceth-6 Phosphate, Phenoxyethanol, Sodium Hydroxyde

### NEW - GREEN - TECHNOLOGY

- Green raw materials and production process
- Decreased emulsifier dosage (approx. 75% reduction)
- Reduced process and energy costs
- Uniform particle size
- Uniform formulas
- Formulating advantage
- Possibility combining different milks :  
f.i. milk 1 + milk 2 + milk 3 = unique new milk

### GENERAL CHARACTERISTICS

- Film former for sun products, hair care and skin care
- SPF booster
- Water resistance booster

### COLLECTION 2012

Koster Milk 102	40% Beeswax
Koster Milk 202	40% Sunflower wax
Koster Milk 302	40 % Carnauba wax T1 / Beeswax



ISO 22716 - cGMP QUALITY STANDARD  
GUARANTEES OUR CUSTOMERS  
A RELIABLE SUPPLY OF QUALITY WAXES



# KOSTER KEUNEN

## A BROAD PORTFOLIO OF QUALITY PRODUCTS

Koster Keunen waxes are used in many different industries as functional ingredients with special benefits. To name a few: oil gelling, binding, improving stability, adding structure.

Koster Keunen offers a broad choice of waxes: natural waxes, specialty waxes exclusively created by Koster Keunen, as well as wax derivatives. Each wax has its own unique properties.

19

### **PERSONAL CARE**

Binding and stability, structure, texture, film forming, pay off, skin feel, gloss

### **PHARMACEUTICAL**

Binding and stability, structure, texture, gloss

### **FOOD**

Binding and stability, coupling, gloss, moisture protection, release agent

### **INKS AND COATINGS**

Film forming, anti-cracking, flexibility, scratch resistance

### **CANDLE WAXES**

Natural waxes, low priced waxblends

NATURAL WAXES

DERIVATIVES

SPECIALTY WAXES

		GENERAL PROPERTIES								STICKS/PENCILS					SKIN CARE					HAIR CARE						
NATURAL WAXES	BEESWAX	Classic	+	+	+	+	+	+	+	+	-	+	•	62	64	+	•	+	+	+	•	+	++	+	•	
	CARNAUBA WAX T1	Hardest glossy wax	•	•	-	-	•	•	•	•	++	-	•	81	84	•	+	--	•	-	--	--	--	-	+	
	CANDELILLA WAX	Oil binding and gelling	++	++	+	+	•	+	•	++	++	•	+	69	72	++	++	+	+	+	--	--	--	+	+	
	SUNFLOWER WAX	Excellent gelling agent	++	++	•	++	•	+	•	++	-	-	++	75	75	•	++	++	++	•	+	+	•	•	-	
	ORANGE PEEL WAX	Vegetable lanolin	•	•	+	+	+	+	•	•	++	+	•	40	45	++	-	++	•	+	•	+	+	++	+	
	LEMON PEEL WAX	Emolliency, skin feel, beautiful aroma	++	•	•	•	•	+	•	+	•	•	•	60	62	•	•	++	+	+	•	+	•	+	+	
	RICE BRAN WAX	High melting	•	+	•	•	•	+	•	•	-	-	++	80	81	•	++	++	•	•	+	+	•	•	•	
ROSE WAX	Beautiful aroma	+	+	+	+	+	+	•	•	+	•	•	55	55	+	+	+	+	•	•	•	•	+	+		
DERIVATIVES	BW ESTER BW67	Excellent gelling, stabiliser	++	++	++	++	•	•	•	++	•	+	+	67	69	•	•	+	++	+	•	•	•	•	•	
	SILICONYL BEESWAX	Skin feel, crack reduction	•	+	++	+	+	+	+	+	•	•	•	69	69	+	-	+	+	+	+	+	++	+	+	
	CERA BELLINA	Compatibility, rheology modifier	•	+	++	+	+	+	+	+	•	•	•	68	70	+	-	++	+	+	+	•	•	•	+	
SPECIALTY WAXES	PEG-12 CARNAUBA	Hydrophilic, self-emulsifying carnauba	•	•	+	+	•	+	+	•	+	•	•	82	82	•	•	+	+	+	+	•	•	•	+	
	PEG-8 BEESWAX EU	Hydrophilic, self-emulsifying beeswax	•	+	++	+	+	+	+	•	•	•	•	68	68	•	•	++	+	+	+	+	•	•	+	
	PERMULGIN 3230	Ozerkite	•	++	++	+	++	+	++	++	++	++	•	79	84	++	+	•	+	+	•	•	•	++	+	
	PERMULGIN 3233 COLIPA COMPL.	Ozerkite	•	++	++	+	++	+	++	++	++	++	•	75	82	++	+	•	+	+	•	•	•	++	+	
	PERMULGIN 3234 COLIPA COMPL.	Ozerkite	•	++	++	+	++	+	++	++	++	++	•	81	89	++	+	•	+	+	•	•	•	++	+	
	SILICONYL CANDELILLA	Oil binding and gelling, skin feel	+	+	++	+	•	+	+	+	+	+	•	•	69	69	+	•	+	+	+	+	+	+	•	+
	KESTER WAX K82P	Plasticizer, high melting	•	++	++	+	++	+	++	++	+	++	•	81	86	++	--	•	++	•	+	•	•	+	•	
	KESTER WAX K80H	High melting, hard	++	+	+	++	•	•	•	+	•	•	+	82	88	•	++	•	+	•	•	•	•	•	•	
	KESTER WAX K82D	Excellent gelling natural oils	++	+	++	++	+	+	•	+	++	•	•	81	94	+	•	•	•	+	•	•	•	•	•	
	KESTER WAX K30G	Silicone like, skin feel	-	•	+	+	•	+	•	•	+	•	•	30	33	+	--	++	•	•	++	+	+	•	•	
KESTER WAX K62	Alternative Jojoba wax/ synthetic spermacetti	•	•	•	+	•	+	•	+	•	+	+	62	63	•	+	++	+	•	+	+	+	•	+		
PERMULGIN 3301	Alternative for beeswax	+	•	•	+	•	•	•	•	•	•	•	61	62	+	+	+	+	•	•	+	+	•	+		
PERMULGIN 3310	Alternative for beeswax	+	+	•	•	•	•	•	•	+	•	•	73	78	•	+	+	++	+	•	+	+	•	+		
PERMULGIN 3500	Petrolatum	•	+	•	•	++	++	•	•	+	•	-	52	55	++	--	+	+	•	++	++	•	•	•		
PERMULGIN 4201	Microwax	++	++	+	•	•	•	•	+	•	•	+	85	90	•	++	•	++	+	•	•	•	•	•		
PERMULGIN 4202	Microwax	+	++	•	•	+	•	•	•	+	+	•	72	77	+	•	•	•	•	•	+	•	•	•		

++ RECOMMENDED // + SUGGESTED // • POSSIBLE // - NOT SUGGESTED // -- NOT RECOMMENDED

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Koster Keunen (USA)  
Watertown, CT, U.S.A