



SEEDS

Natural beauty starts with a small seed and a great idea.





NATURE, PASSION AND SCIENCE.

Our ingredients for beautiful skin.

With the creation of a separate division for cosmetic specialties at Berg + Schmidt Oleo in 2012, the foundation was laid for the development of new, innovative and high-tech cosmetic ingredients to be offered alongside our existing portfolio of functional lipids, namely cosmetic esters, fatty alcohols, and fatty acids. We started our sales activities by supplying shea butter under the now well-known brand name of **BergaCare SB**. A commonly used raw material, we supply in excellent quality. Our famous and award-winning thickening emulsifier **BergaMuls ET 1** was invented during that time as well, and we were far ahead of the trend curve with this **up-cycled product**, as you will see in this brochure. The development was based on a collaboration with our sister food company Hydrosol. We are part of the interdisciplinary Stern-Wywiol Gruppe, and can benefit in many ways from its outstanding expertise in all kinds of food applications.



Within the last decade, successful and **innovative products for certified natural cosmetic products** have grown out of our initial ideas. At Berg + Schmidt Cosmetics, we offer approved natural and **sustainable** cosmetic raw materials, which are state of the art, and which answer market and consumer needs. It is our aim to make our customers' and consequently formulators' lives easier by finding smart solutions for their formulation challenges. The focus of all our activities lies on **healthy and vital skin**, and we are passionate about finding new ways to improve skin quality. With our application laboratory in the Stern-Technology Center near Hamburg, we have access to new technologies and can further learn from our food colleagues.



Food for beautiful skin.

Consumers expect natural ingredients to do the same job as traditional systems when used in the same way. In talking about natural and sustainable alternatives, we have to re-think not only the origin of the raw materials but also the formulation process. *Let's talk about what's in cosmetic formulations, and not what isn't!*

BergaMuls ET 1

(INCI: *Beta-Glucan and Pectin*)

The **trendsetter** within our range of natural cosmetic raw materials. It's based on fruit and cereal fibre by-products from the food industry i.e. juice production, and is therefore a prime example of **"circular beauty"**.

The fruit fibres that provide the thickening pectin are obtained from freshly harvested, de-juiced and de-oiled fruits. The pulp is then dried and milled. β -glucan is derived from cereal fibre. It's known for its **moisturizing, soothing and skin calming** properties.

BergaMuls ET 1 is also an outstanding multi-functional ingredient, because it's an:

- *Emulsifier*
- *Thickener*
- *Sensory enhancer*



BergaCare FG products

... are natural silicone alternatives to cyclopentasiloxane and are readily biodegradable. The range consists of four products, giving a broad choice for formulators.

Especially the origin from olive and **Kalahari melon seed oil** gives the different blends additional functionality, as well as great sustainability. The latter oil is very rich in essential fatty acids, while providing antioxidant properties in topical applications.

- *BergaCare FG 5*
- *BergaCare FG Olive*
- *BergaCare FG M12*
- *BergaCare FG L11*



BergaCare Shea Butter

Women's gold is what shea butter is often referred to. This valuable and natural ingredient not only nourishes the skin when used in lotions or creams. It also nourishes African women and communities that harvest the widely growing shea nuts. In contrast to huge monoculture plantations, shea nuts are only collected between May and October, and only as much as is available. The nuts are then dried and mechanically processed to obtain the raw butter. This work enables women to improve the quality of their lives and the lives of their families and communities. It's more than just an ingredient. It's a tradition. BergaCare SB shea butter (INCI: Butyrospermum Parkii (Shea) Butter) supports this tradition.



63 % acetone insoluble

47 % phospholipid complex
 12–18 % phosphatidylcholine
 10–15 % phosphatidylethanolamine
 8–11 % phosphatidylinositol
 3–8 % phosphatidic acids

11 % other lipids
 5–7 % glycolipids
 2–3 % sterols, tocopherols

5 % carbohydrates

36 % triglycerides

1 % water



Standard Lecithin
 (brownish oil)
 ~ 15 % PC



Increased share of
 phospholipid complex
 and acetone-insoluble
 components

De-oiled Lecithin
 (yellow powder)
 ~ 24 % PC



Fractionated phospholipids
 of phosphatidylcholine (PC)
 (INCI: Lecithin)

BergaSom
 (yellow to brown paste)
 50–90 % PC



Hydrogenated fractions of
 phosphatidylcholine (PC)
 (INCI: Hydrogenated Lecithin)

BergaSom H
 (white to yellowish powder)
 70–90 % PC

BergaSom Sun

BergaSom Sun products (INCI: Lecithin; INCI: Hydrogenated Lecithin) are the ideal active or functional ingredients for certified natural cosmetics, and are based on sunflower. The different grades can enhance active penetration, improve the sebum quality of acne-prone skin, or act as emulsifiers or co-emulsifiers in sophisticated skin care formulations with outstanding sensory qualities.

Sunflower-derived lecithin and its phospholipids, namely phosphatidylcholine, offer several advantages compared to conventional materials with similar functions or activity. Lecithin is known and appreciated because it is “generally recognized as safe” and due to its good skin compatibility. However, the term lecithin is used for a variety of different substances, from which the fractionated BergaSom Sun products differ:



BergaCare SmartLipids

BergaCare SmartLipids are the latest generation of lipid-based delivery systems, and allow higher loading of lipo-soluble actives, while protecting them physically and chemically to prevent degradation. Once applied to the skin, they form a 2nd skin, reinforce the skin barrier (BergaCare SmartLipids Ceramide – INCI: Aqua (and) Caprylic/Capric Triglyceride (and) Ceramide NP (and) Sodium Cetearyl Sulfate (and) Ceramide AP (and) Phytosterols (and) Pentylene Glycol (and) Sunflower Seed Acid (and) Stearic Acid (and) Behenic Acid (and) Oleic Acid (and) Palmitic Acid), ensure prolonged, retarded release and improve overall skin penetration, leading to improved efficacy. They are COSMOS-approved and offer a natural alternative to commonly used anti-aging actives (BergaCare SmartLipids Bakuchiol – INCI: Aqua, Cetyl Palmitate, Bakuchiol, Pentylene Glycol, Glyceryl Behenate, Caprylic/Capric Triglyceride, Sodium Stearoyl Glutamate). What's more, they come in an aqueous suspension and allow formulators to work with lipo-soluble actives even in aqueous and oil-free systems like trending serums and toner.



An advanced delivery system technology that makes formulators' lives easier.



Penetration enhancer



Controlled and prolonged release



Restoration of the natural skin barrier



Protection of sensitive activities



Deep Hydration Beauty Serum

Skin nourishing serum to energize the skin

| Phase | Product | INCI Name | Supplier | % (w/w) |
|-------|--------------------------------|---|----------------|-----------|
| A | Demin. Water | Aqua | – | 87.0 |
| | BergaMuls ET 1 | Beta Glucan (and) Pectin | Berg + Schmidt | 4.0 |
| | Dermofeel PA-3 | Sodium Phytate, Aqua, Alcohol | Evonik | 0.1 |
| | Verstatil SL non GMO | Aqua, Sodium Levulinate, Potassium Sorbate | Evonik | 1.5 |
| | Pentylene Glycol | Pentylene Glycol | Evonik | 3.0 |
| B | Centella Asiatica GW | Glycerin, Aqua, Centella Asiatica Extract | Diverse | 1.0 |
| | Corn Po4 PH B 9042 | Distarch Phosphate | Diverse | 1.0 |
| | Citric Acid (25 % solution) | Citric Acid | Diverse | Adjust pH |
| C | BergaCare SmartLipids Ceramide | Aqua (and) Caprylic/Capric Triglyceride (and) Ceramide NP (and) Sodium Cetearyl Sulfate (and) Ceramide AP (and) Phytosterols (and) Pentylene Glycol (and) Berg + Schmidt Sunflower Seed Acid (and) Stearic Acid (and) Behenic Acid (and) Oleic Acid (and) Palmitic Acid | Berg + Schmidt | 15.00 |



Manufacturing procedure

- Weigh in all raw materials from phase A and start stirring
- Add all raw materials from phase B and stir for 30 minutes
- Homogenize at 7000 rpm for 1 minute
- Adjust pH to 5.3 and add phase C



Circular beauty and up-cycled ingredients have been used in cosmetic formulations for many years, in the form of plant or seed extracts and crushed nutshells as peeling particles, and are the next big trend. A trend for the future. And the current up-cycling trend goes even further, as almost all waste materials or discarded objects from the food industry are considered valuable and are being turned into sophisticated products. The best examples are fruit fibre and olive oil waste as used in our **BergaMuls ET 1** or **BergaCare FG Olive**. To take full advantage of this great potential, we work closely with our Stern-Wywiol sister companies.

Caring Body Lotion

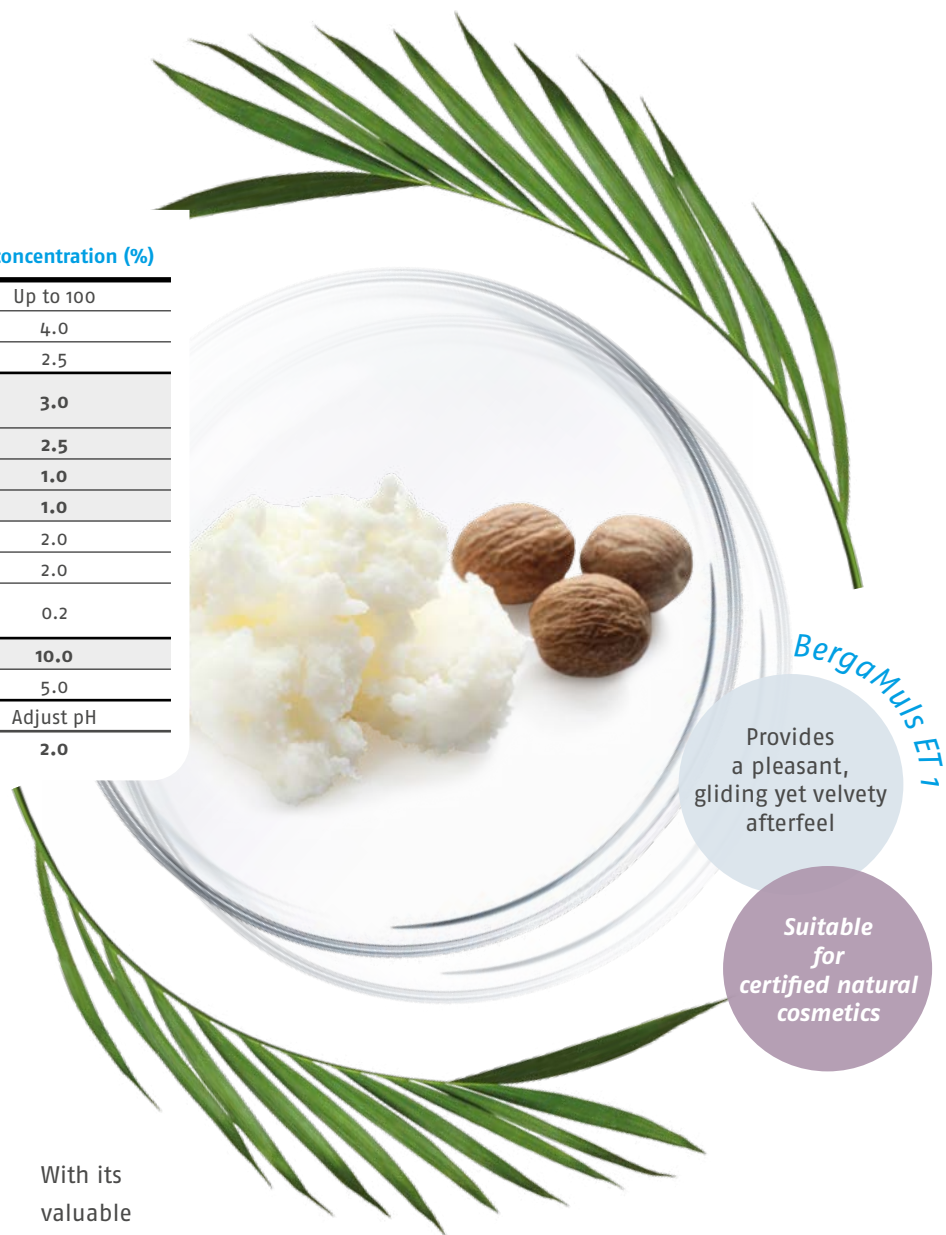
Nourishing body care with the extra touch

| Phase | Product | INCI Name | Supplier | Use concentration (%) |
|-------|------------------------------|--|-----------------------|-----------------------|
| A | Demin. Water | Aqua | - | Up to 100 |
| | Cosphaderm® Pentiol Natural | Pentylene Glycol | Cosphatec | 4.0 |
| | Glycerin 99.5% | Glycerin | Diverse | 2.5 |
| B | BergaCare FG Olive | Hydrogenated Ethylhexyl Olivat (and) Hydrogenated Olive Oil Unsaponifiables | Berg + Schmidt | 3.0 |
| | Vegarol 1618 50:50 | Cetearyl Alcohol | Berg + Schmidt | 2.5 |
| | BergaCare EM-CP | Cetyl Palmitate | Berg + Schmidt | 1.0 |
| | Vegarol 1898 | Stearyl Alcohol | Berg + Schmidt | 1.0 |
| | Grape Seed Oil | Vitis Vinifera (Grape) Seed Oil | Interchimie | 2.0 |
| | Jojoba Oil | Simmondsia Chinensis (Jojoba) Seed Oil | Interchimie | 2.0 |
| | Cosphaderm® T-70 non GMO Eco | Tocopherol (and) Helianthus Annuus (Sunflower) Seed Oil | Cosphatec | 0.2 |
| B1 | BergaCare SB | Butyrospermum Parkii (Shea) Butter | Berg + Schmidt | 10.0 |
| | Beurre de Kpangnan Raffiné | Pentadesma Butyracea Seed Butter | Interchimie | 5.0 |
| C | Citric Acid Solution (25%) | Citric Acid | Diverse | Adjust pH |
| D | BergaMuls ET 1 | Beta-Glucan (and) Pectin | Berg + Schmidt | 2.0 |

Manufacturing procedure

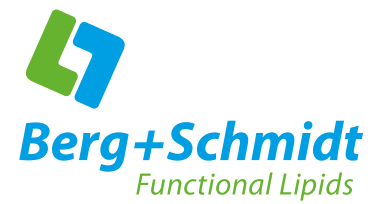
- Prepare phase A and heat up to 75°C
- Mix all raw materials from phase B and heat to 75°C until homogenous
- Then add both butters of phase B1 to phase B and stir until all materials are molten
- Add phase B/B1 to A while stirring and homogenize for 30 seconds at 7000 rpm
- Cool to below 40 °C, adjust pH and add BergaMuls ET 1 (D) while stirring. Continue stirring until formulation is homogenous.

With its valuable components like fatty acids, phytosterols and antioxidants, shea butter perfectly nourishes the skin. It helps to regulate the moisture level in the skin, and is re-fatting and conditioning, which leads to a wonderfully smooth and supple skin. The light yet creamy body lotion leaves the skin well-cared for.



Provides a pleasant, gliding yet velvety afterfeel

Suitable for certified natural cosmetics



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A member of



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Our ingredients for beautiful skin.

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- Emulsifier
- Thickener
- Sensory enhancer

BergaCare FG products

... are natural silicone alternatives to cyclopentasiloxane and are readily biodegradable. The range consists of four products, giving a broad choice for formulators.

Especially the origin from olive and **Kalahari melon seed oil** gives the different blends additional functionality, as well as great sustainability. The latter oil is very rich in essential fatty acids, while providing antioxidant properties in topical applications.

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- BergaCare FG Olive
- BergaCare FG M12
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63 % acetone insoluble

- 47 % phospholipid complex
 - 12-18 % phosphatidylcholine
 - 10-15 % phosphatidylethanolamine
 - 8-11 % phosphatidylinositol
 - 3-8 % phosphatidic acids
- 11 % other lipids
 - 5-7 % glycolipids
 - 2-3 % sterols, tocopherols
- 5 % carbohydrates
- 36 % triglycerides
- 1 % water

Standard Lecithin
(brownish oil)
~ 15 % PC

Increased share of phospholipid complex and acetone-insoluble components

De-oiled Lecithin
(yellow powder)
~ 24 % PC

Fractionated phospholipids of phosphatidylcholine (PC)
(INCI: Lecithin)

BergaSom
(yellow to brown paste)
50-90 % PC

Hydrogenated fractions of phosphatidylcholine (PC)
(INCI: Hydrogenated Lecithin)

BergaSom H
(white to yellowish powder)
70-90 % PC

BergaCare SmartLipids

BergaCare SmartLipids are the latest generation of lipid-based delivery systems, and allow higher loading of lipo-soluble actives, while protecting them physically and chemically to prevent degradation. Once applied to the skin, they form a 2nd skin, reinforce the skin barrier (BergaCare SmartLipids Ceramide – INCI: Aqua (and) Caprylic/Capric Triglyceride (and) Ceramide NP (and) Sodium Cetearyl Sulfate (and) Ceramide AP (and) Phytosterols (and) Pentylene Glycol (and) Sunflower Seed Acid (and) Stearic Acid (and) Behenic Acid (and) Oleic Acid (and) Palmitic Acid), ensure prolonged, retarded release and improve overall skin penetration, leading to improved efficacy. They are COSMOS-approved and offer a natural alternative to commonly used anti-aging actives (BergaCare SmartLipids Bakuchiol – INCI: Aqua, Cetyl Palmitate, Bakuchiol, Pentylene Glycol, Glyceryl Behenate, Caprylic/Capric Triglyceride, Sodium Stearoyl Glutamate). What's more, they come in an aqueous suspension and allow formulators to work with lipo-soluble actives even in aqueous and oil-free systems like trending serums and toner.

An advanced delivery system technology that makes formulators' lives easier.

- Penetration enhancer
- Controlled and prolonged release
- Restoration of the natural skin barrier
- Protection of sensitive activities





Natural beauty starts with a small seed and a great idea.

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- ➔ Weigh in all raw materials from phase A and start stirring
- ➔ Add all raw materials from phase B and stir for 30 minutes
- ➔ Homogenize at 7000 rpm for 1 minute
- ➔ Adjust pH to 5.3 and add phase C



Manufacturing procedure

Circular beauty and up-cycled ingredients have been used in cosmetic formula-
tions for many years, in the form of plant or seed extracts and crushed nutshells as
peeling particles, and are the next big trend. A trend for the future. And the current
up-cycling trend goes even further, as almost all waste materials or discarded
objects from the food industry are considered valuable and are being turned into
sophisticated products. The best examples are fruit fibre and olive oil waste as
used in our **BergMuls ET 1** or **BergCare FG Olive**. To take full advantage of this
great potential, we work closely with our Stern-Wywiol sister companies.



Deep Hydration Beauty Serum

Skin nourishing serum to energize the skin

| Phase | Product | INCI Name | Supplier | % (w/w) |
|-------|-----------------------------|---|----------------|-----------|
| A | BergMuls ET 1 | Beta Glucan (and) Pectin | Berg + Schmidt | 4.0 |
| | DermiIn. Water | Aqua | - | 87.0 |
| | Verstättl SL non GMO | Aqua, Sodium Levulinate, Potassium Sorbate | Evonik | 0.1 |
| B | Centella Asiatica GW | Glycerin, Aqua, Centella Asiatica Extract | Evonik | 3.0 |
| | Corn Pop. PH B 9042 | Distarch Phosphate | Diverse | 1.0 |
| | Citric Acid (25 % solution) | Citric Acid | Diverse | Adjust pH |
| C | Bergcare Smartlipids | Aqua (and) Caprylic/Capric Triglyceride (and) Ceramide NP (and) Sodium Cetearyl Sulfate (and) Ceramide AP (and) Phytosterols (and) Pentylene Glycol (and) Berg + Schmidt Sunflower Seed Acid (and) Stearic Acid (and) Behenic Acid (and) Oleic Acid (and) Palmitic Acid | Berg + Schmidt | 15.00 |

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- ➔ Prepare phase A and heat up to 75°C
- ➔ Mix all raw materials from phase B and heat to 75°C until homogeneous
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- ➔ Cool to below 40 °C, adjust pH and add BergMuls ET 1 (D) while stirring. Continue stirring until formulation is homogeneous.



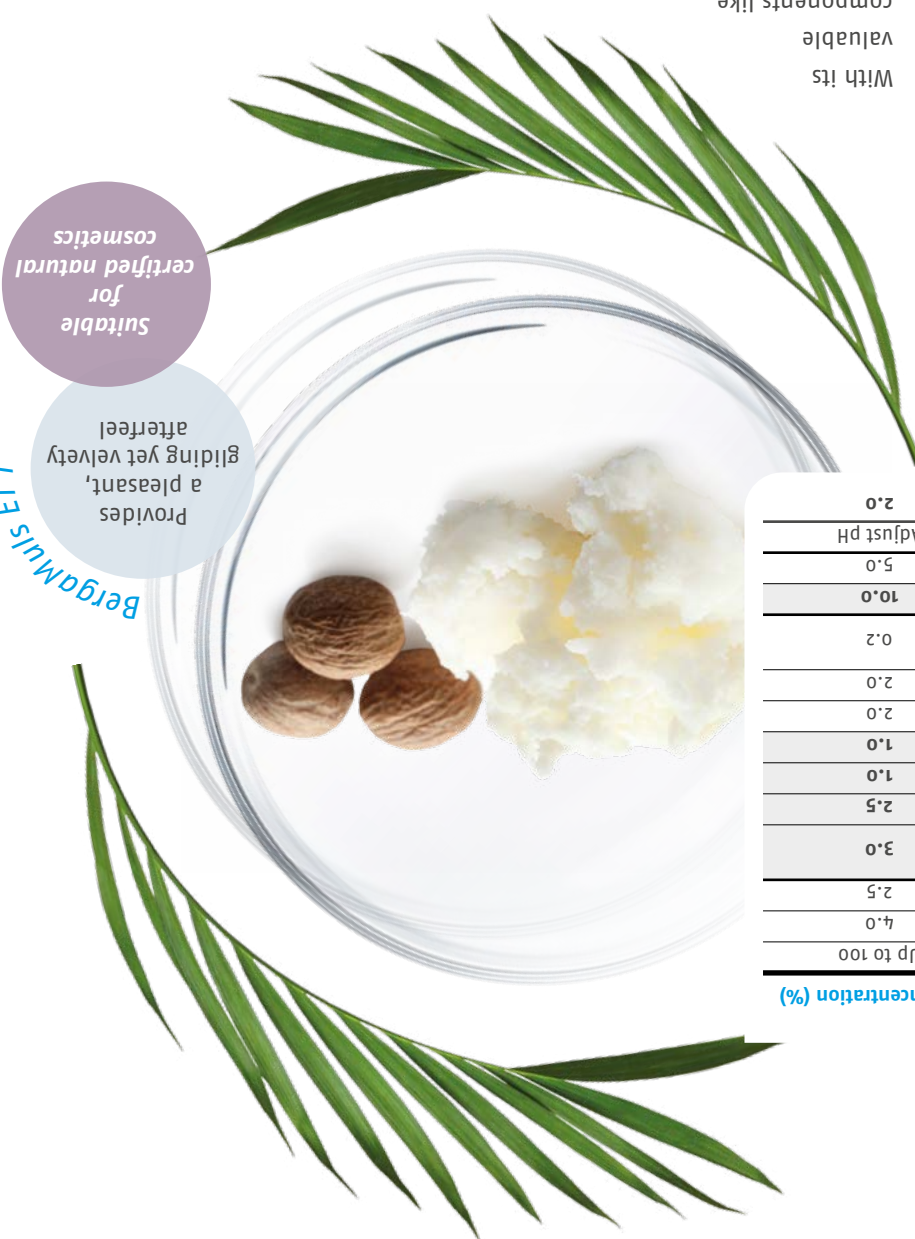
Manufacturing procedure

| Phase | Product | INCI Name | Supplier | Use concentration (%) |
|-------|------------------------------|--|----------------|-----------------------|
| A | DermiIn. Water | Aqua | - | Up to 100 |
| | Cosphaderm® Pentol Natural | Pentylene Glycol | Cosphatic | 4.0 |
| | Glycerin 99.5% | Glycerin | Diverse | 2.5 |
| B | BergCare FG Olive | Hydrogenerated Olive Oil Unsaponifiables (and) Hydroxylated Ethylhexyl Olivates (and) Hydroxylated Olive Oil Unsaponifiables | Berg + Schmidt | 3.0 |
| | BergCare EM-CP | Cetearyl Alcohol | Berg + Schmidt | 2.5 |
| | Vegarol 1898 | Cetyl Palmitate | Berg + Schmidt | 1.0 |
| | Vegarol 1898 | Stearyl Alcohol | Berg + Schmidt | 1.0 |
| | Grape Seed Oil | Vitis Vinifera (Grape) Seed Oil | Interchimie | 2.0 |
| | Jojoba Oil | Simmondsia Chinensis (Jojoba) Seed Oil | Interchimie | 2.0 |
| | Cosphaderm® T-70 non GMO Eco | Tocopherol (and) Helianthus Annuus Sunflower Seed Oil | Cosphatic | 0.2 |
| | BergCare 58 | Butyrospermum Parkii (Shea) Butter | Berg + Schmidt | 10.0 |
| | B1 | Pentadecanum Butyrate Seed Butter | Interchimie | 5.0 |
| | Citric Acid Solution (25%) | Citric Acid | Diverse | Adjust pH |
| D | BergMuls ET 1 | Beta-Glucan (and) Pectin | Berg + Schmidt | 2.0 |

Nourishing body care with the extra touch

Caring Body Lotion

lotion leaves the skin well-cared for.
which leads to a wonderfully smooth and supple skin. The light yet creamy body
helps to regulate the moisture level in the skin, and is re-fattening and conditioning.
antioxidants, shea butter perfectly nourishes the skin. It
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Provides a pleasant, gliding yet velvety afterfeel

Suitable for certified natural cosmetics

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