



KONUNGARIKET SVERIGE

VARUMÄRKE NUMMER 402835

## OS-Mineral Extracts Shampoo 250 ml

- No-Parabens
- No-S.L.S
- With Dead Sea Mineral

### Description:

OS-Mineral Extracts Shampoo A unique formula, enriched with Dead Sea Mud and plant extracts, the clean and nourishes the roots and the scalp. The shampoo can be daily used, leaving your hair smooth and strong with a very pleasant and delicate lasting fragrance.

**Direction:** Massage the shampoo on wet hair and scalp using fingertips. Rinse thoroughly.

### Ingredients:

Aqua, Coco-Betaine, Sodium Cocoyl Glutamate, Disodium Cocoyl Glutamate, Coco amid propyl Betaine, Cetrimonium Chloride, Lauryl Glucoside, Stearyl Citrate, Aminopropyl Dimethicone, Carbomer, Polyquaternium – 11, Triethanolamine, Parfum, Phenoxyethanol, Ethylhexylglycerin Cyclopentasiloxane, Cyclohexasiloxane, Panthenol, Aqua (Water), Chlorphenesin, EDTA, Sodium Benzoate, Glyceryl Caprylate, Maris Sal, Silt, CI 42090, CI 19140, CI 14720, CI 15985

### Caution:

- Use this cosmetic product only for the purpose it was intended for and according to the use instruction.
- Use this cosmetic product only if there is no known sensitivity to any of the ingredients.
- Do not swallow or ingest.
- Avoid direct contact with eyes. In case of eye contact, wash well with water.
- Expel from children touch.
- Keep away from direct heat, sunlight or fire. Store in a cool and dry place.

## Hair Conditioning Agent



### Cetrimonium Chloride

- are quaternary ammonium salts.
- the buildup of static electricity.
- also help to cleanse the skin or to prevent odor by destroying or inhibiting the growth of microorganisms and by helping water to mix with oil and dirt so that they can be rinsed away.
- They also help to form emulsions by reducing the surface tension of the substances to be emulsified and help to distribute or to suspend an insoluble solid in a liquid.
- carry a positive charge that attracts them to the slightly negatively charged skin and hair proteins, accounting for their use as antistatics.
- In addition, Cetrimonium has the ability to disrupt the surface membranes of microorganisms and has been used in antiseptics.
- This ingredient is mainly used in hair products such as hair dye, shampoo/conditioner, styling gel, mousse, detangler, dandruff treatment and relaxer.

### Lauryl Glucoside

Lauryl glucoside is cleansing agents in shampoo.

Lauryl glucoside has excellent foaming capacity and good dermatological compatibility.

is NOT derived from peanuts (*Arachis hypogaea*). Therefore, use of this ingredient in cosmetic products does not represent an allergy concern for children (or adults) with peanut allergies. Alkyl glucosides consist of alkyl groups bound to glucose in the D-glycopyranoside form. The glucose portion of the compound may consist of mono-, di-, tri-, oligo- or polysaccharides. For example, Decyl Glucoside with a degree of polymerization of 1.6 is a mixture of decyl monosaccharide (glucopyranoside) and decyl disaccharide (also called maltopyranoside).

### Citric Acid

Citric Acid is an organic acid that is widely distributed in plants and animals. Sodium Citrate is a salt of Citric Acid that is commonly used in Melli personal care products. Potassium Citrate, Aluminum Citrate, Diammonium Citrate, Ferric Citrate, Magnesium Citrate, Monosodium Citrate and Zinc Citrate are other salts of Citric Acid that may be used in Melli personal care products.

Citric Acid and its Diammonium, Potassium and Sodium salts help preserve cosmetics and personal care products by chelating (complexing) metals. Citric Acid and its salts are also added to cosmetics to help adjust the acid/base balance.

## **Aminopropyl Dimethicone**

These modified silicones have specific properties, which allow them to be excellent conditioning agents and create a protective barrier on the hair strands. They are considered the best high-performing conditioning polymers. This water-insoluble silicone you found in Melli Shampoo and conditioners.

### **Pros**

aminopropyl dimethicone actually bonds to damaged areas on the hair's cuticle and makes the hair feel softer. It also creates the protective barrier like other silicones and provides easier combing. What makes it different from other silicones and hair is that it does not cause buildup on the scalp and hair. It will provide conditioning to damage areas, increase color-retention, and aid in deep conditioning.

### **Cons**

This silicone is a pain to remove from our hair despite it not being considered a build-up silicone. aminopropyl dimethicone is a semi-water soluble silicone that may build up hair over time,

### **Panthenol:**

Panthenol is a common ingredient that is found in a number of hair and skin products because of its ability to attract moisture and build healthier hair. This ingredient, which is a provitamin of B5, is water soluble and is an especially common additive in shampoos and conditioners. Those who use these products may not always read the contents of the bottles, but panthenol is also often found in many personal care items because it helps keep the products more chemically stable. The ingredient is added to protective ointments as well, and sometimes in hair therapy products. While panthenol is generally thought to be safe for use, those who use products with this ingredient should make an effort to understand how it might affect their hair or skin to prevent potential problems.



## Overview

If you read the label on a random skin or hair care package, it's likely you'll find panthenol as one of the ingredients. This additive is all natural and is derived from vitamin B-5, which can make the hair thicker and shinier. Panthenol works by helping the body create more nutrients specifically for the hair and skin. With better nourishment, cells stay healthier, regenerate faster and are better able to withstand environmental hazards, like radiation from sun rays or an excessively dry environment. One common misconception about panthenol is that it is a waxy material that creates a sticky feel. The chemical is actually an emulsifier (it helps incompatible chemicals to stay mixed in creams and anti aging serums), which gives it a smooth texture. Panthenol is what is known as a chiral molecule, which means that each side of the molecule is a mirror image of the other. It works because each side has different chemical and biological properties that are either amplified or diminished, depending on the surrounding chemicals, which enables it to keep the surrounding ingredients in flux.



## Misconceptions

There are a number of benefits to using products that contain panthenol, but there are several misconceptions about it because it's used in a wide variety of applications. The most common misnomer is that it causes heavy buildup in hair that many contribute to dandruff and oily hair. However, hair care experts dispute this rumor and say that the elements of panthenol could not cause this problem.

Another misconception is that because this ingredient binds so completely to hair that it's hard to wash out, even with hot water. The chemical does bind to the hair, but since it has no sticky or waxy properties, it will likely wash away easily, depending on its concentration in the hair care solution. If you have any concerns about using panthenol, contact your hair care specialist

### **Panthenol's Main Properties**

Another use of panthenol is that of a humectant, which helps skin and hair products absorb and retain moisture. This ingredient has the unique ability to take moisture directly from the air before it binds to hair follicles, which results in hair that is shinier and has more volume. Panthenol also helps those who battle frizzy, unmanageable hair because the ingredient gives hair strands a smoother texture, which in turn makes hair easier to manage. In addition, the moisture that it attracts can prevent hair from appearing dry or fragile.

Because of its properties as an emulsifier, when panthenol is used in skin lotions or creams, it helps them spread over the skin evenly, for complete coverage. This is especially important for a hair product, where the hair strands must be covered from the roots to the ends to be truly effective. The multifaceted panthenol molecules also have the ability to reflect light, which can give hair a healthy shine. While panthenol has a number of positive elements, there are still many questions about this ingredient that make some people hesitate to use products that contain it.



### **Panthenol's Basic Chemistry**

Panthenol is a derivative of vitamin B5 (pantothenic acid) and is known as a provitamin. Panthenol is what is called a chiral molecule, or one that has a molecular structure that gives it a "handedness," either right-handed (dextrorotatory) or left-handed (levorotatory). These two mirror-image enantiomers are not superimposable on one another, in the same manner in which your two hands are mirror images of one another rather than exact duplicates. Oftentimes, the two versions of a molecule have differing chemical or biological properties. For cosmetic purposes, panthenol is supplied either as a racemic mixture (50/50) of both types of enantiomers or as the purified "D" version. This is most relevant in skin care applications, as the D-version of panthenol is the biologically active version.



## The Properties

The multiple hydroxyl (-OH) groups on the panthenol molecule impart most of the physical properties to it, most particularly its high solubility in water and other solvents. Panthenol is a highly effective humectant, a class of ingredients used in skin and hair care products to promote moisture-retention. It has a highly hydrophilic and hygroscopic chemical structure which attracts water from the atmosphere and binds it to various sites along the molecule. Humectants typically possess multiple alcohol (hydroxyl) or similarly hydrophilic sites (such as ethers or ammonium groups), which are available for hydrogen bonding with water molecules. Hydrogen bonding between humectants and water aids in moisture-retention by minimizing water loss due to evaporation.

Panthenol is not only a humectant, but is also a useful moisturizer and emollient. It spreads evenly on the surface of hair strands, forming a smooth film on the surface of the cuticle. This film gives enhanced coherence to the reflection of light from the surface of the hair, which imparts significant gloss and shine. The smooth film also provides excellent slip between adjacent strands of hair and detangling properties. Panthenol is capable of penetrating the cuticle and entering the hair shaft as well, where it aids in moisture retention and provides volume.

It is important to note that sometimes penetration of the shaft by ingredients can create a rough cuticle surface and lead to frizz, due to swelling of the hair shaft. This may not occur for everyone and is dependent upon several factors, including porosity of the hair and the amount of the ingredient used in the product. It is a potential undesirable effect, so keep this in the back of your mind when using a product containing the ingredient.

Although there is a persistent rumor that panthenol creates waxy buildup on hair, there is no evidence to support such an assertion. Panthenol is not at all similar in structure to waxy materials. It is also extremely water soluble, alcohol soluble, mildly soluble in glycerin and is fairly easily capable of being mixed into most oils. Additionally, panthenol has no component to its chemical structure that would cause it to bind tightly to the surface of a hair strand. For these reasons, it should be easily removed from hair by rinsing, washing with mild shampoo and even conditioner cleansing. If one is experiencing problems with build up and unpleasant hair texture when using a product containing panthenol, the issue is more likely due to other ingredients in the formulation.

Panthenol is readily absorbed by skin, and as the precursor of vitamin B5, it directly impacts metabolic processes in epidermal cells. It has been found to have many beneficial properties for epithelial tissue, including increased hydration and improved elasticity and is believed to promote cell regeneration. When used in shampoos and conditioners, panthenol conceivably provides added benefit by improving scalp health and potentially improving hair growth.



## Final Thoughts

Panthenol is a naturally-occurring material that adds several beneficial properties to hair care formulations. It is a humectant, emollient, glossifier, detangler and moisturizing agent. It is highly water soluble and is also easily removable with mild plant-derived oils or via conditioner cleansing. When selecting humectant-containing products, one must keep in mind the climate in which they live, how that impacts hair and how they might expect a humectant to contribute to the overall performance of their own hair within the constraints of that climate. Also, depending upon the porosity of your hair and the type of product being used, you may experience a roughened hair texture or some frizz due to penetration of the hair shaft. If this should happen, it might be best to discontinue use or to decrease use of the product. Finally, experimentation is the best way to find out what works well on your own hair.

## Panthenol

is used in ointments and personal care products, and is able to treat skin irritations such as mild burns, sunburns, insect bites and cuts when mixed with allantoin. Other functions include improving skin hydration, reducing itching and inflammation, and accelerating healing in epidermal wounds. For personal care products, panthenol offers antimicrobial properties, which are important for controlling the growth and transmission of bacteria.

According to the Food and Drug Administration, panthenol is safe for use. In addition, the safety of panthenol and pantothenic acid has been evaluated by the Cosmetic Ingredient Review (CIR) Expert Panel, and deemed safe for use in cosmetics and personal care products. Although studies have shown that panthenol is safe to use in cosmetics, for first time usage, perform a patch test on your skin to prevent any allergic reactions to this ingredient. Panthenol is used in cosmetics and hair products to bind hair follicles, coat and seal moisture in the hair and lubricate the follicles. Because of the moisturizing effects associated with panthenol, the skin might become softer and smoother with the use of panthenol products. This ingredient is also useful for treating chemically damaged hair.

## Maris Sal

The Dead Sea is unique due to its high concentrations of salts and minerals. It is particularly rich in magnesium, sodium, potassium and calcium. Use of Dead Sea mud has been studied in connection with health benefits and healing properties for physical ailments. Do not use Dead Sea mud as a replacement for medical treatments that have been prescribed by your doctor. Dead Sea salt refers to salt extracted or taken from the Dead Sea. The Dead Sea is popular with tourists from all over the world for its reputed therapeutic effects. The water of the Dead Sea has a salt content of 29%, compared to 4% in the oceans, and is consequently substantially denser. This allows anyone to easily float on Dead Sea water because of its greater density. Its mineral composition is also different from ocean water since only 12–18% of Dead Sea salt is sodium chloride.

A 2006 analysis of a commercial Dead Sea Salt product a 2.5% sodium chloride content; by comparison, 85% of the salt in normal ocean water is sodium chloride.

## Silt

Two of the most difficult aspects of gardening are understanding the difference between soil types and knowing what soil to use. Soil classification is based on the soil particles' texture and size. Most soils are composed of sand, silt and clay. While silt and chalk have similar textures, silt is easier to use and more versatile than chalk. Silt's fine particles are what give it a slippery, smooth texture, and it's these particles that make it easy to compact silt soil. The fact that silt is so compactable makes it easier to keep nutrients and moisture in place for prolonged periods of time. Silt is considered a good compromise soil between clay and sand, since its weight and density are in between these two other types of soil.

While silt's known for its ability to be compacted, this very trait can also be problematic. For one thing, the tightly packed soil prevents water from leaving it, which is a problem for certain plants. Furthermore, water and air tend to have a hard time accessing the roots when silt soil is used. There are techniques that you can use, however, to deal with these issues. For example, you can add compost to the silt's top layer, or just turn this layer over a few inches periodically. Either method will result in the compacted soil being broken up.



**Description of Product:**

Name of Product : **OS-Mineral Extracts Shampoo**

Volume/weight : 250/400 ml

Nature of packaging (e.g. polypropylene tube/glass bottle/gold ball) : Plastic Bottle

pH: 4.0-7.0

**Target Consumer:**

Children <14 years : No

Infants <3 years : No

Adults: Yes

Frequency (e.g. twice a day) : Once a day

Location (e.g. eye area) : Hair

Leave on or rinse off product : Rinse off

Class of product (choose one of the following: decorative cosmetic, skin care, perfume, toiletry, intimate external hygiene) : hair Care

For how long? = 1 years

Adverse effects reported? (Frequency and type) = Non

Percentage concentrations of INCI ingredients supplied (must total 100%)

**Perfume/Fragrance:**

Product name: Chamonix

Percentage of Perfume in product = 0,05%

**Plant Extracts (incl. essential oils)**

Quantitative allergen listing (26 allergens listed in Cosmetics Directive 76/768/EC) : NA

**Tests Conducted**

Microbial Content : Yes

Preservative Efficacy (Challenge test) : NA

Heavy metal content : NA

**Use instructions:** Apply a few drops on clean face. Tap gently until absorbed.

## **OS-Mineral Extracts Shampoo & Safety –**

We do not use the following ingredients:

**NO Hydroquinone** – An ingredient that was once considered a leading bleaching agent.

Now it is considered unsafe when used in cosmetic preparations.

Today, the use of Hydroquinone as a bleaching ingredient is banned in many countries, including the member states of the European Union under Directive 76/768/EEC: 1976. once considered a leading bleaching agent.

Now it is considered unsafe when used in cosmetic preparations. Today, the use of Hydroquinone as a bleaching ingredient is banned in many countries, including the member states of the European Union under Directive 76/768/EEC: 1976.

**NO Arbutin** – A glucosylated Hydroquinone, which may carry similar cancer Risks.

Its usage is restricted in many countries as it may be hazardous.

**NO Kojic Acid** – An additional lightening ingredient that is restricted in many countries, due to its potential to cause sensitivity and skin irritations.

The European scientific committee on Consumer Products (SCCP) suggested to limit its usage level as it may pose risk to consumers' health.

**NO Hydrogen Peroxyde** – a bleaching ingredient that may cause mild to severe stinging, burns and irritations

**Shelf Life:** 36 months

**Period After Opening:** 12 months

# Product Formulation

PRODUCT:

**Melli by Dr.makeup**

**OS - Mineral Extracts Shampoo**

No		%	Function
1	Aqua	A	Solvent
2	Coco-Betaine	C	Surfactant
3	Sodium Cocoyl Glutamate, Disodium Cocoyl Glutamate	D	Surfactant
4	Cocoamidopropyl Betaine	D	Surfactant
5	Cetrimonium Chloride	E	Hair Conditioning Agent
6	Lauryl Glucoside, Stearyl Citrate	F	Hair Conditioning Agent
7	Aminopropyl Dimethicone	F	Hair Conditioning Agent
8	Carbomer	F	Emulsion Stabilizer
9	Polyquaternium - 11	F	Hair Conditioning Agent
10	Triethanolamine	F	Emulsion Stabilizer
11	Parfum	F	Fragrance
12	Phenoxyethanol, Ethylhexylglycerin	G	Preservative
13	Cyclopentasiloxane, Cyclohexasiloxane	G	Hair Conditioning Agent
14	Panthenol, Aqua (Water)	G	Hair Conditioning Agent
15	Chlorphenesin	G	Preservative
16	EDTA	G	Chelating Agent
17	Sodium Benzoate	G	Preservative
18	Glyceryl Caprylate	G	Preservative
19	Maris Sal	G	Hair Conditioning Agent
20	Silt	G	Hair Conditioning Agent
21	CI 42090, CI 19140, CI 14720, CI 15985	G	Colorant
	TOTAL	100,000	

KEY: (A): 100%-60% ; (B): 59.9%-30% ; (C) 29.9%-10% ; (D): 9.9%-5% ; (E): 4.9%-2.5% ; (F): 2.4%-0.5% ; (G): 0.4%-0%