

Ama Oil™

Restores hair and helps hold the hairstyle in place. Ama Oil penetrates the hair where the lipid layer is damaged, forming a protective layer on the hair and protecting the hair from excess moisture. Ama Oil protects your hair, helps hold the hairstyle in place, enhances the curls or keeps straightened hair straight, and has an anti-frizz effect.

Ama Oil complex contains **amaranth seed** extract.

Healthy and beautiful hair is something everyone notices before we even get to introduce ourselves. But our desire to keep up with the trends puts our hair to the test. In addition to the harmful external factors (UV radiation, environmental pollution, temperature fluctuations), the health of our hair is also affected by mechanical (combing) and chemical factors. Hair dyeing, bleaching and chemical treatments change the structure of the hair and may make it porous, frizzy and brittle, and look limp and dull. This is caused by the loss of the lipids protecting the outermost layer of the hair – the cuticle, as well as the innermost level – the cortex. Protect your hair from excess moisture to keep it shiny and healthy. The damaged sections of hair allow excessive water molecules to penetrate the hair and start forming new bonds with keratin fibres, causing frizziness and losing the original shape of the hairstyle. The lipid layer prevents excess moisture from penetrating the hair. The products form a protective lipid layer on the hair to help achieve a normal moisture balance and protect it with a natural protective layer. Ama Oil attaches to the area where the hair lipids are damaged, restores the inner structure of the hair and helps hold the hairstyle in place.

During the keratinisation process of the outer layer of hair, a sticky cell membrane complex is formed between the cells, which is a continuous lipid structure. This lipid layer contains free fatty acids, palmitin, oleic acid, and stearin, as well as squalene, cholesterol sulphate, ceramides and cholesterol. The amount of lipids in hair is limited – approx. 1–9%. Lipids are found in the outer layer of the hair, forming a barrier to protect the hair against water. The lipids between the outer layer and the inner layer bind the two layers together. The lipid layer is damaged by oxidative processes, dyeing, permanent waves, and the sun.

Ama Oil improves the lipid structure to ensure optimum moisture balance in your hair, helps hold the hairstyle in place, and removes any frizziness. It penetrates the damaged parts of the hair that have lost their lipids and creates a protective coating against the excess moisture penetrating between the keratin layers.

Ama Oil is produced from the seeds of the pendant amaranth (*Amaranthus caudatus*), rich in unsaturated fatty acids (linoleic, palmitic and oleic acid) and squalene. Squalene is part of the natural lipid components of the hair, so the presence of this lipid increases the biocompatibility of Ama Oil with the hair, as well as its efficiency. In addition, amaranth seeds contain leucine, (an amino acid needed for protein synthesis), arginine, lysine, sulphur, phosphorus, calcium, iron, potassium, zinc, and vitamins E and B.

Pendant amaranth, in Greek referred to as flower that never fades, is a rapidly growing annual herbaceous plant which was already cultivated in America 4,000 years ago. Its seeds were grown for food, together with corn, beans, pumpkin, potatoes and quinoa. Amaranth seeds are small (1,000–3,000 per gram), and far more protein-rich than corn and wheat, and amaranth flour is used in countless savoury and sweet dishes. The seeds are also used for breakfast cereals (when toasted and used in the whole-grain form), and to make bread.

Ama Oil controls excess moisture in the hair, prevents damage and helps hold the hairstyle in place, even in poor weather conditions.

To understand the synergy between keratin and water, we need to be aware that hair biosynthesis occurs in the aquatic environment and that the final keratinisation process takes place in a dry environment. Therefore, the hair retains a certain hydration and dehydration capacity, with keratin having the ability to attract water molecules from the surrounding environment.

How much it affects the structure of the hair (and thus the shape and form) depends on the number of water molecules around it, as well as the number of binding sites of these water molecules and the access to them, which depends on the full lipids of the hair.

The condition of the hair is also affected by the moisture in the surrounding air as the hair absorbs moisture even when not damaged. Due to their small size, water molecules give elasticity to keratin fibres, but can also separate the keratin molecules and weaken the bonds between them. So, moisture affects the condition of the hair. The more damaged the hair, the more excess moisture can penetrate the hair, causing it to swell up and become viscous. The hairstyle will not hold, and the hair will become difficult to manage.

The Ama Oil complex is part of the ingredients of the following **S+ Haircare** line products: **Longer Hair Shampoo**, **Longer Hair Treatment** and **All In Hydrating Conditioner**.