

Sunscreen Glossary

Allergies

An allergy is a defensive reaction of the human immune system to a certain substance. The organism identifies a given substance as a foreign body and therefore sets its defence mechanisms in motion. Allergens are widespread and occur in the natural world, in food products of both plant and animal origin, in products of daily use and at work. The best known groups of allergens in cosmetic products are colorants, perfumes, preservatives and emulsifiers.

Sherpa Tensing has therefore developed a Sensitive Line of products which do not contain any such substances for users who are prone to allergies.

Light protection filters

These protect the skin against UV radiation. There are two classes of filter: chemical and physical light protection filters. Chemical UV filters are specially developed substances that form a protective film over the skin and transform harmful UV rays into harmless heat. Mineral filters function according to the same principle. In addition to converting UV rays, they also reflect back part of the light. The only approved mineral filter at present is titanium dioxide. Almost all the titanium dioxides used are based on nanotechnology. Our Sherpa Tensing products contain only chemical filters.

Sun protection factor

How long sunbathing can last depends above all on the skin's own capacity for protection. This is the time a person can spend unprotected in the sun without becoming sunburned. This varies considerably depending on the type of skin. The sun protection factor (SPF) is the factor by which that period in the sun can be extended. If you use a sunscreen with SPF 15, for example, you can stay in the sun 15 times longer than you would be able to without any form of protection at all. As there are bound to be individual variations, however, this time should never be used to the full.

Emulsifiers

Emulsifiers are additives that stabilize an emulsion, an emulsion being a fine dispersion of one liquid in another in which it is neither soluble nor miscible, such as oil in water.

Free radicals

Free radicals occur under the influence of sun rays in cells. They accelerate the skin's ageing process and play a role in the emergence of skin cancer. Sherpa Tensing sunscreen products therefore contain the patented CellActive®-Protect Complex, which neutralizes free radicals.

Shelf-life

The products should always be properly closed and protected against frost or excessive heat. When on the beach, therefore, do not leave your sun creams and lotions in the sun. Sherpa Tensing sunscreen products keep for about 3 years. Once opened, however, they must be used up within 12 months. Please heed the symbol of a pot:



Preservatives

These protect the sunscreens against bacteria, ensuring that they can be safely used even several years later. We use preservatives according to the philosophy “As much as necessary, as little as possible.”

Sherpa Tensing therefore uses only very mild preservatives in the lowest effective quantity possible.

Nanoparticles

Nanoparticles are particles smaller than 100 nanometres (one ten-thousandth of a millimetre). Some sunscreens contain nano titanium dioxide as a sun protection filter. The advantage of nanoparticles compared with microparticles is that they do not leave a white film on the skin. The use of nanotechnology is controversial, however, even if large-scale trials have proved that nano titanium dioxide in sunscreen products is indeed safe.

Water resistance

Waterproof products retain their protective properties even in water. This is especially important, as UV radiation can penetrate water, too. Sports lovers, bathers and children often spend hours at a time in water or playing beside water and therefore need a good sunscreen that is resistant to both water and sweat.

Sunscreen must be re-applied after bathing and towel-drying as otherwise even waterproof products will lose part of their protective action.

UVA protection, UVA/UVB balance

In late 2006, the EU passed new, more stringent recommendations on UVA protection. The ratio of UVA to UVB protection (the UVA/UVB balance) now has to be at least one to three. Since the 2007 season, all Sherpa Tensing products have met these requirements. The level of UVA protection is indicated by the new UVA label:



Instant protection

This means that the sunscreen provides full protection as soon as it is applied. Sherpa Tensing products take effect as soon as they are applied.