

Frequently Asked Questions

7[™] TriCalm[™] Rapid Itch Relief System with COSMEDERM-

Q: What is COSMEDERM-7[™] ?

A: COSMEDERM-7[™] is the natural element *strontium*. It is a soft yellow-white metal that is chemically similar to calcium and is widely found in nature and in humans. It is the 8th most abundant element in seawater and is found in the foods we eat, especially in green leafy vegetables. Discovered by Gary S. Hahn, M.D. at San Diego, California-based Cosmederm Technologies to have powerful anti-irritant properties, strontium is known commercially as COSMEDERM-7[™]. This patented anti-irritant compound dramatically suppresses sensory irritation -- without side effects.

Q: What does COSMEDERM-7[™] do?

A: Human clinical studies conducted both by Cosmederm scientists and by independent research laboratories confirm that COSMEDERM-7[™] effectively suppresses the sting, burn, itch and redness responses caused by a broad range of topically applied chemical irritants now used in cosmetics, personal care products and pharmaceuticals. Exciting new data, published in peer-reviewed medical journals, demonstrate that COSMEDERM-7[™] can also reduce itch caused by allergic skin reactions, thus suggesting many new applications to protect the skin from environmentally-induced irritation. This data was the genesis of our TriCalm anti-itch system.

Q: Why is COSMEDERM-7[™] commercially important?

A: Irritation is a major commercial problem for cosmetics and personal care products manufacturers. In fact, the efficacy of many products is frequently limited due to the irritating effects of their active ingredients. By reducing irritation, COSMEDERM-7[™] enables more effective products to be made without the side effects of stinging, itching, burning and redness.

Q: Is COSMEDERM-7[™] patented?

A: Cosmederm Technologies has extensive patent protection for COSMEDERM-7[™], including two U.S. patents and patents issued or pending in 25

countries.

Q: How does COSMEDERM-7™ work?

A: COSMEDERM-7™'s anti-irritant activity is believed to be due to its ability to block *neurogenic inflammation*. The skin and other organs are innervated by a fine network of unmyelinated sensory nerves (type "C" neurons) that respond to chemical, thermal and mechanical stimuli. These polymodal sensory nerves act as skin-irritant receptors and respond to noxious stimuli that may cause tissue damage. When activated by chemical irritants, skin-irritant receptors ("nociceptors") transmit sensations of itching, burning, stinging and diffuse burning pain. COSMEDERM-7™ is believed to block one of the earliest steps in the neurogenic inflammatory cascade, thus blocking sensory irritation sensations and subsequent tissue-destructive inflammatory reactions. Since chemically sensitive nociceptors do not transmit sensations of touch, pressure or localized pain, COSMEDERM-7™ does not produce numbness or a reduced response to painful stimuli, as would a local anesthetic such as Lidocaine.

Q: Is COSMEDERM-7™ safe?

A: COSMEDERM-7™ is remarkably safe – in some studies as safe as calcium, and is made from natural ingredients. More than 10,000 human test exposures indicate that the compound has no known side effects. It is the 8th most abundant element in sea water, is found in green leafy vegetables, and 0.8-5 mg. are consumed daily by humans. One form of COSMEDERM-7™ has been approved in the European Union after an extensive safety review.

Q: How has COSMEDERM-7™ been clinically tested?

A: The clinical studies in which COSMEDERM-7™ was tested were designed and executed according to the highest scientific standards: Double blind, vehicle-controlled, random treatment assignment trials, so that neither the clinical technicians nor the subjects knew which formulas were used.

Q: What are some product applications for COSMEDERM-7™?

A: COSMEDERM-7™ is useful for virtually any topical product that has an active ingredient that can be irritating at high concentrations. COSMEDERM-7™ is currently being used in chemical peels, anti-aging products, acne products and anti-itch products. Double-blind, vehicle-controlled, random-treatment assignment human clinical studies demonstrate that COSMEDERM-7™ can substantially block the stinging, burning, itching and redness response that can be caused by a wide variety of chemical irritants, including alpha and beta hydroxy acids (AHAs & BHAs), anti-perspirants & deodorants, anti-acne agents, vitamin C, depilatories, hair care products and many other ingredients used in cosmetics, personal care products and pharmaceuticals. COSMEDERM-7™ is chemically stable in topical formulations and is compatible with a wide range of product formulations and ingredients, including fragrances and preservatives.

Q: How does COSMEDERM-7™ improve the efficacy of products?

A: COSMEDERM-7™ allows products to be formulated with the highest concentrations of active ingredients that would otherwise be too irritating for consumer use. Alpha hydroxy acids, for example, produce the most substantial "anti-aging" effects when they have both a high concentration and low pH (high acidity) – a combination that can be highly irritating. COSMEDERM-7™ allows AHA products to have such optimal conditions, thus producing the highest level

of efficacy and extraordinary comfort.