



EcoSmooth™
reinvert conditioning



EcoSmooth™ Satin
Frequently Asked Questions



Personal Care

Sincerely Yours



Frequently Asked Questions

This file has been designed to help you to find information about EcoSmooth™ Satin Conditioning Polymer quickly and easily.

General & Miscellaneous

Physical and Chemical Properties

Handling and Formulation

Performance

Regulatory Status / Health & Safety

Physical and Chemical Properties

What is EcoSmooth™ Satin?

EcoSmooth™ Satin is a conditioning polymer that provides conditioning benefits in body washes and mild conditioning shampoos.

What is the INCI name of EcoSmooth™ Satin Conditioning Polymer?

The INCI name is Ethylene/Sodium Acrylate Copolymer.

What is the ionicity of EcoSmooth™ Satin Conditioning Polymer?

As supplied, EcoSmooth™ Satin is an anionic polymer in solution.

How much active is in the product?

The product contains 24 to 27% solids.

Will EcoSmooth™ Satin introduce additional surfactants in my formulation?

EcoSmooth™ Satin Conditioning Polymer does not contain any surfactants.

Does EcoSmooth™ Satin contain added preservatives like parabens?

EcoSmooth™ Satin is preserved with Methylisothiazolinone (MIT). It is free of parabens and formaldehyde-releasers.

What is the pH of the product?

The pH of the product as delivered is between pH 9.1 and 10.8.

Are there known incompatibilities between EcoSmooth™ Satin and usual cosmetic ingredients?

EcoSmooth™ Satin has been tested in a range of shampoo and body wash formulations. Although we have not identified any particular incompatibilities to date, the anionic nature of the product may trigger some lack of stability at times.



General & Miscellaneous

Is the EcoSmooth™ Satin a patented technology?

The Dow Chemical Company has sought patent protection for this technology and its usage in personal care. However, we encourage you to run your own searches to guarantee freedom-to-operate for your formulations. EcoSmooth™ Satin Conditioning Polymer is produced using a Dow proprietary process that has been patented.

Manufacturing and Supply

Where is EcoSmooth™ Satin Conditioning Polymer manufactured?

EcoSmooth™ Satin Conditioning Polymer is currently manufactured in Europe.

Is it available in my region?

EcoSmooth™ Satin Conditioning Polymer can be made available globally.

In what container and size is it available?

EcoSmooth™ Satin Conditioning Polymer is currently available in 20 kg pails.

Handling and formulation

Is the product easy to pump?

EcoSmooth™ Satin Conditioning Polymer is a low-viscosity liquid (<1000 cps) which can be easily pumped with diaphragm pumps or stainless steel gear and progressive cavity pumps. Piston pumps should be avoided because of the risk of polymer build-up.

Is the product sensitive to shear?

EcoSmooth™ Satin Conditioning Polymer is fairly resistant to shear. It is suitable for use with most dispersing systems traditionally used in the cosmetic industry

Is the product sensitive to extreme temperatures?

For optimum performance and ease of processing, EcoSmooth™ Satin Conditioning Polymer should be protected from freezing.

What is the shelf life of EcoSmooth™ Satin Conditioning Polymer?

Product shelf life is 12 months.

Should I take any precautions before using EcoSmooth™ Satin Conditioning Polymer?

The container should be gently stirred or shaken before use to homogenize the solids.

How do I formulate with EcoSmooth™ Satin Conditioning Polymer?

Example formulations and instructions are available upon request.



Do I need high shear to disperse EcoSmooth™ Satin Conditioning Polymer in my formulation?

EcoSmooth™ Satin Conditioning Polymer can be introduced into a formulation using low to moderate shear.

What is the best way to introduce EcoSmooth™ Satin Conditioning Polymer in my formulation?

EcoSmooth™ Satin Conditioning Polymer can be added at any point in the formulation, and may be heated if necessary.

Will EcoSmooth™ Satin influence the pH of my formulation?

EcoSmooth™ Satin Conditioning Polymer is only moderately alkaline and at the recommended usage level, it should not affect a formulation.

Will EcoSmooth™ Satin Conditioning Polymer be stable in my formulation?

EcoSmooth™ Satin Conditioning Polymer is usually very stable in surfactant systems.

Within which range of pH can EcoSmooth™ Satin Conditioning Polymer be used?

EcoSmooth™ Satin Conditioning Polymer has a strong chemical resistance to aggressive environments, however stability of the dispersion in the fully formulated product is more likely to be easily achieved within the range pH 5-10.

Can EcoSmooth™ Satin Conditioning Polymer be used with silicones?

EcoSmooth™ Satin Conditioning Polymer does not form coacervates like cationic polymers and therefore it is not beneficial to use EcoSmooth Satin as a replacement for cationic polymers in silicone-containing shampoos.

Performance

What are the main benefits provided by EcoSmooth™ Satin Conditioning Polymer?

EcoSmooth™ Satin is a conditioning polymer that provides conditioning benefits equal to cationic guar in mild shampoos. In body wash formulas, it provides in-wash sensory benefits similar to cationic polymers (PQ-7, cationic guar).

What is the mechanism of action providing this benefit?

EcoSmooth™ Satin Conditioning Polymer is soluble when formulated in a shampoo. However, when the shampoo is diluted in-use, it is believed that EcoSmooth™ Satin phase separates and deposits on hair.

**At what level should I use it?**

Recommended use level is between 0.2% and 1% as active ingredient. This equates to 0.8% to 4% of the product as supplied. The actual level may vary based on specific formulation needs.

Will EcoSmooth™ Satin impact the appearance of my formulation?

Depending on the surfactant system used, EcoSmooth™ Satin Conditioning Polymer can yield formulas that are very clear or slightly hazy. In general, higher pH and higher surfactant levels improve the stability and clarity of EcoSmooth™ Satin in shampoo and body wash formulations.

Regulatory status / Health & Safety**Has EcoSmooth™ Satin Conditioning Polymer ever been tested on animals?**

Local Lymph Node Assay (Mice) has been carried out on EcoSmooth™ Satin Conditioning Polymer as there are no acceptable non-animal alternative currently available and this test was required to comply with some non-European regulations.

Is EcoSmooth™ Satin Conditioning Polymer classed as eco-toxic like traditional cationic conditioning technologies?

Ecotoxicity tests are on-going to address this question

Is EcoSmooth™ Satin Conditioning Polymer a nanomaterial?

EcoSmooth™ Satin does not meet the definition of a nanomaterial as listed in Article 2 (k) of the EU Cosmetic Regulation and hence products containing them are not subject to the notification requirements of Article 16 nor need they be subject to any further safety assessment that is required due to the presence of nanomaterials.

What toxicology data is available for EcoSmooth™ Satin Conditioning Polymer?

A Toxicology Statement can be made available upon request.

Is a Cosmetic Dossier available for EcoSmooth™ Satin Conditioning Polymer?

A Cosmetic Dossier can be made available upon request.

Is EcoSmooth Satin approved for use in China?

EcoSmooth Satin INCI name is not in the existing cosmetic raw materials list (2003, Ministry of Health). Dow plans to submit the registration application to SFDA. Cosmetic manufacturers have responsibility for the final cosmetic product notification to the relevant Authorities.



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