

Creagel® Crystal



*viscosity and texture modifier, thickener,
film former, moisture barrier*

Application Sheet

Creagel® Crystals are thickened lipids, which have been produced from various oils by a polymerisation process. Creagel® Crystals are either fully synthetic or combinations of synthetic and natural lipids. They are anhydrous gels varying from transparent to slightly coloured depending on the lipid used.

| Trade Name | INCI Name |
|----------------------|---|
| Creagel® Crystal AF | Hydrogenated Polydecene (and) Ethylene/Propylene Copolymer |
| Creagel® Crystal ID | Isododecane (and) Ethylene/Propylene Copolymer |
| Creagel® Crystal IH | Isohexadecane (and) Ethylene/Propylene Copolymer |
| Creagel® Crystal JO | Simmondsia Chinensis (Jojoba) Seed Oil (and) Ethylene/Propylene Copolymer |
| Creagel® Crystal LA | Isododecane (and) Limnanthes Alba (Meadowfoam) Seed Oil (and) Ethylene/Propylene Copolymer |
| Creagel® Crystal OL | Isododecane (and) Olea Europaea (Olive) Fruit Oil (and) Ethylene/Propylene Copolymer |
| Creagel® Crystal SUN | Isododecane (and) Helianthus Annuus (Sunflower) Seed Oil (and) Ethylene/Propylene Copolymer |
| Creagel® Crystal VS | Squalane (and) Ethylene/Propylene Copolymer |

In addition to standard products, Creagel® Crystals can be made with an oil of your choice.

Benefits

- forms a long lasting pseudoplastic film
- water resistant
- increases photostability
- gloss and shine

Properties

- viscosity and rheology modifier
- pseudoplastic
- film former
- allow hot and cold processing
- excellent heat stability
- stable gel structure, resistant to stirring
- pumpable and easy to clean from machinery in comparison to Polyisobutenes



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Application Areas

Skin Care

In skin care emulsions, Creagel® Crystals thicken and modify rheological properties. Due to the Creagel® Crystals, final products will form an occlusive film and have a longer play time. In addition to these physical properties, Creagel® Crystals also provide the same skin care benefits as the lipids in which they are based on. They can also be used as a base for various anhydrous treatment products in which oil soluble ingredients can be added.

Sun Care

Creagel® Crystals stabilize the emulsion structures and the SPF values of suncare formulations with physical UV-filters. Creagel® Crystals create a structure, which functions as a grid for physical UV-filters allowing an even distribution of the UV-pigments and preventing their sedimentation. When formulating with Creagel® Crystals, less surfactant is needed and this reduces the skin penetration of organic UV-filters. The hydrophobic quality of Creagel® Crystals gives a possibility to formulate water resistant products.

Colour Care

Creagel® Crystals are ideal bases for lip glosses as they form a pseudoplastic and water resistant film. Creagel® Crystals create a structure, which functions as a grid for colour pigments. This allows higher and more stable colour loading than traditional formulations. With Creagel® Crystals it is possible to formulate products, which give an even colour distribution and a water resistant film. These properties are desirable especially in mascaras, eyeliners and lipsticks.

Formulating

Creagel® Crystals can be used in O/W and W/O emulsions and in anhydrous systems. When mixed with water, the Creagel® Crystals become opaque, but if mixed with oils, they stay translucent.

Emulsions

Creagel® Crystals are added in the oil phase before emulsification, and they can be used in both hot and cold processes. Creagel® Crystals tolerate strong mixing and homogenization and in general they don't have any specific requirements for the formulating process.

Typical use level: 2-5%

Anhydrous Systems

In lip gloss formulations, the colour dispersions can be added directly into Creagel® Crystals without heating, and therefore the colour shading can be done in one time efficient step. Creagel® Crystals are user-friendly materials as they are easy to clean from machinery, unlike traditional lip gloss ingredients.

In anhydrous products, the ingredients can be mixed together either in hot or cold process. Creagel® Crystals are ideal bases for actives, which are sensitive to water, and they can also be used as bases for aromatherapy and other wellness treatments.

Typical use level: 40-60%

Packaging: 25kg and 50kg open-head drums