

*gel-emulsifier, viscosity builder*

## Application Sheet

Creagel® EZ is a range of auto-emulsifiers for cold processes. They are based on polymers and various emollients. Creagel® EZs can be used as primary emulsifiers or as co-emulsifiers to produce milky gel emulsions with a soft and non-tacky skin feel. Creagel® EZs are safe and non-irritating as they are fully polymerized. The monomer content is guaranteed to be below 2ppm.

Creagel® EZs can be used in both hot and cold processes, and they can be added into formulations even after emulsification, in case further increase in viscosity and emulsion stability is desired. Creagel® EZs function in wide range of pHs, normally between 4-9, and in case of Creagel® EZ IN, even up to pH 12.

Trade Name	INCI Name
Creagel® EZ 2	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Hydrogenated Polydecene (and) Laureth-7
Creagel® EZ 4	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) C13-14 Isoparaffin (and) Laureth-7
Creagel® EZ IH	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Isohexadecane
Creagel® EZ IN	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Isononyl Isononanoate
Creagel® EZ VS	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Squalane

### Benefits

- fast and reliable results in cold process
- easy to formulate with
- suitable for a wide range of pH
- can be added even after emulsification
- silky feel with no tackiness
- choice of ethoxylate-free products (EZ IH, IN and VS)
- safe and non-irritating

### Properties

- viscosity regulator
- texture modifier
- film former
- fully polymerized



## Application Areas

### Skin Care

Creagel® EZs are suitable for O/W emulsion. Creagel® EZs are easy to formulate with and they produce emulsions with a light and fresh feel. As Creagel® EZ IH, IN and VS can be used to create instant emulsions by just adding water, they give interesting possibilities for spas and beauty institutes for creating custom tailored products to be used in treatments.

### Sun Care

Creagel® EZs are suitable for sunscreens as they are compatible with both physical and chemical UV-filters and as they produce emulsions with a smooth and non-tacky feel. They are also ideal for after sun products as they have a capacity to absorb large amounts of water, resulting in soft emulsions with a fresh and cooling feel upon application.

### Colour Care

As in skin care emulsions, Creagel® EZs are also suitable for all O/W colour care emulsions such as foundations, make-up primers and mascaras.

## Formulating

Creagel® EZs are easy to formulate with as they are compatible with most cosmetic ingredients, and as they don't have any specific requirements for the formulating process. Creagel® EZs can be used in a pH range from 4-9, and Creagel® EZ IN even up to pH 12. Creagel® EZs resist electrolytes up to 1,5% and they can support ethanol up to 15%.

Creagel® EZs are typically added into the oil phase. They should be mixed in until the oil phase becomes homogenous. Then the water phase can be added slowly, while mixing gently, until the viscosity has been fully built up. No heating or high shear mixing is required, but if other ingredients in the formulation need such processing, it will not affect the performance of Creagel® EZs.

Creagel® EZ IH, IN and VS can be used as described above, but they do not necessarily need an oil phase. They can be used alone to create instant emulsions with just water. These Creagel® EZs can be added into water and mixed until the viscosity builds up. The other ingredients may be added after this. Again, no heating or high shear mixing is required, but is not a problem, if needed for other ingredients.

Typical use level: 2-20%

Packaging: 25kg and 100kg open head drums