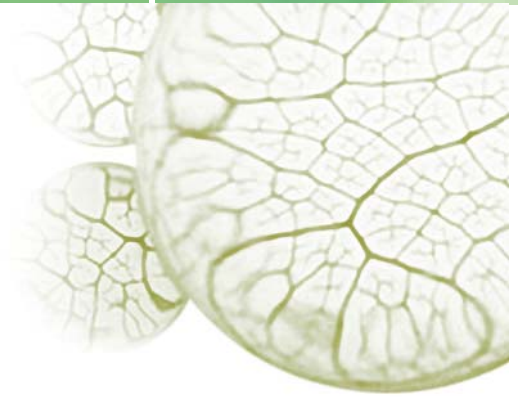
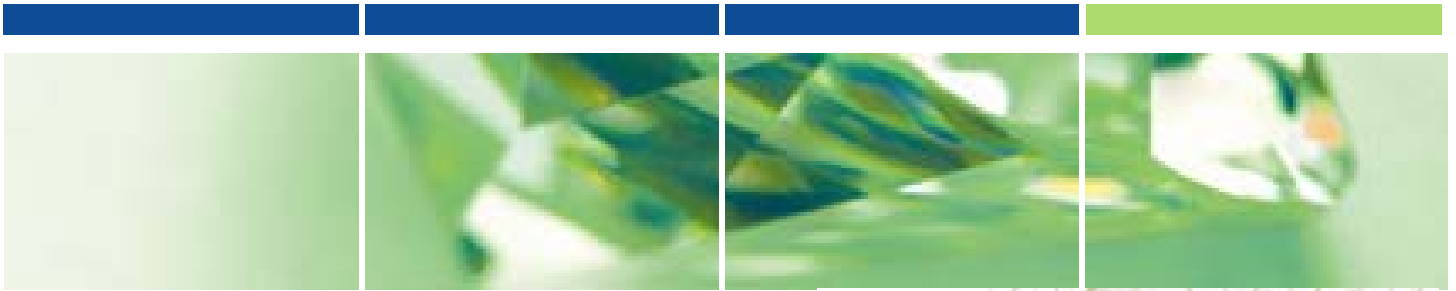




# Xanthan Gum

## Keltrol Overview





## Xanthan Gum

**Keltrol** is the trade name for the product Xanthan Gum products produced by CP Kelco. They are high molecular weight polysaccharides manufactured by a fermentation process.

In cosmetics, Xanthan Gums are used for a variety of applications. In emulsions, they increase the heat stability of the product when used at low concentrations (between 0.1 % and 0.2 %). At concentrations up to 0.5 %, Xanthan Gums thicken water-based systems such as shower gels and/or lotions.

Xanthan Gums are not sensitive to high shear rates or electrolytes and are stable over a broad pH range (3-11), which make them interesting for nearly all cosmetic products and applications.

All Keltrol types are soluble in hot and cold water.

**Keltrol CG-Grades** are the cosmetic grades of Xanthan Gum from CP Kelco. They contain an acceptably low (and specified) bacterial count and have an increased number of specification parameters thus guaranteeing a high quality for the use in all kind of cosmetic formulations.

**Keltrol CG** is the standard cosmetic grade product which forms a cloudy gel when dispersed in water.

**Keltrol CG-F** has a smaller particle size resulting in a fine powder product. **Keltrol CG-T** is used for clear products (the "T" stands for transparent). **Keltrol CG-BT** is a Xanthan Gum which can be hydrated in a 20% sodium chloride solution to form a clear gel. **Keltrol CG-SFT** shows reduced pseudo plastic properties and is known to have a smooth flow. **Keltrol CG-RD** is „readily dispersible“ and is especially made for systems where only low shear rates are possible. It produces a clear gel, even if there is no „T“ in the name.

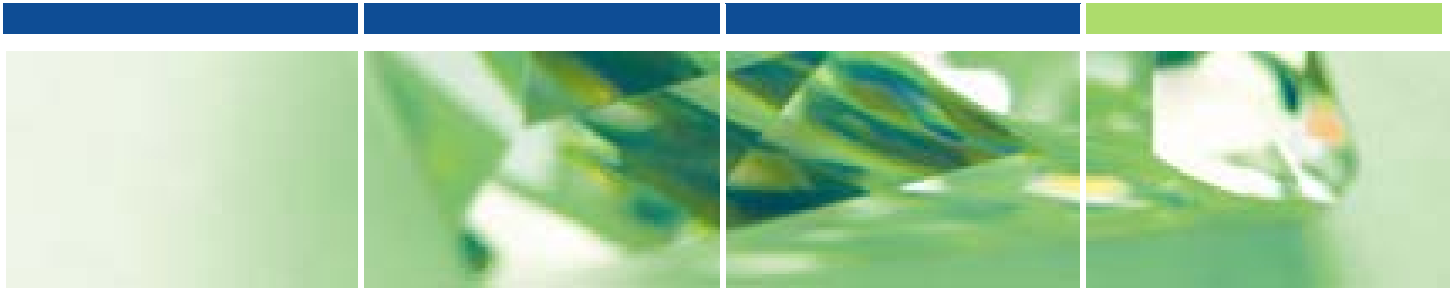
Product name	Typ	Particle size [µm]	Viscosity <sup>1</sup> [mPa·s]	Viscosity <sup>2</sup> [mPa·s]	pH value <sup>3</sup>
Keltrol CG	Standard	180	1200-1600	600-1200	6.0-8.0
Keltrol CG-F	Fine	75	1200-1600	600-1200	6.0-8.0
Keltrol CG-T	Transparent	180	1200-1600	600-1200	6.0-8.0
Keltrol CG-BT	Brine tolerant	180	1200-1600	600-1200	6.0-8.0
Keltrol CG-SFT	Smooth flow and transparent	180	800-1300	250-600*	6.0-8.0
Keltrol CG-RD	Readily dispersible and transparent	180	1200-1600	600-1200	6.0-8.0

<sup>1</sup>: 1% Xanthan Gum in 1% KCl (60rpm)

<sup>2</sup>: 0.25% Xanthan Gum in synthetic tap water (3rpm)

\*: 0.3% Xanthan Gum in 0.3% KCl (3rpm)

<sup>3</sup>: 1% Xanthan Gum in deionised water



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