

BENTONE GEL®

EFFICIENT RHEOLOGY MODIFICATION FOR ELEGANT SKIN CARE SYSTEMS



INTRODUCTION

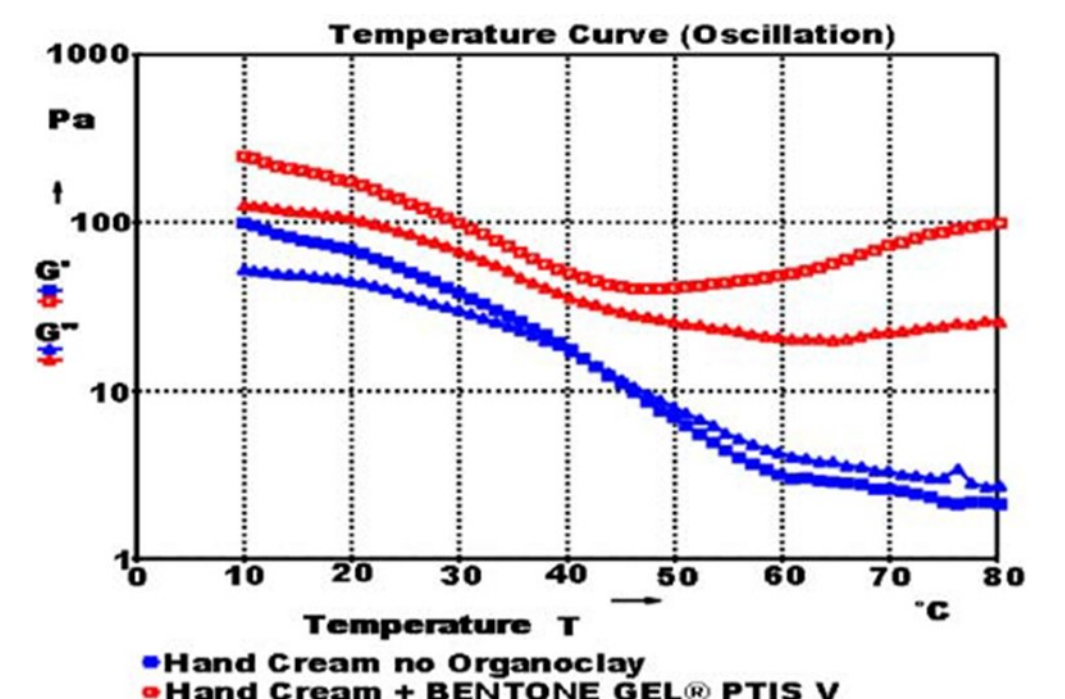
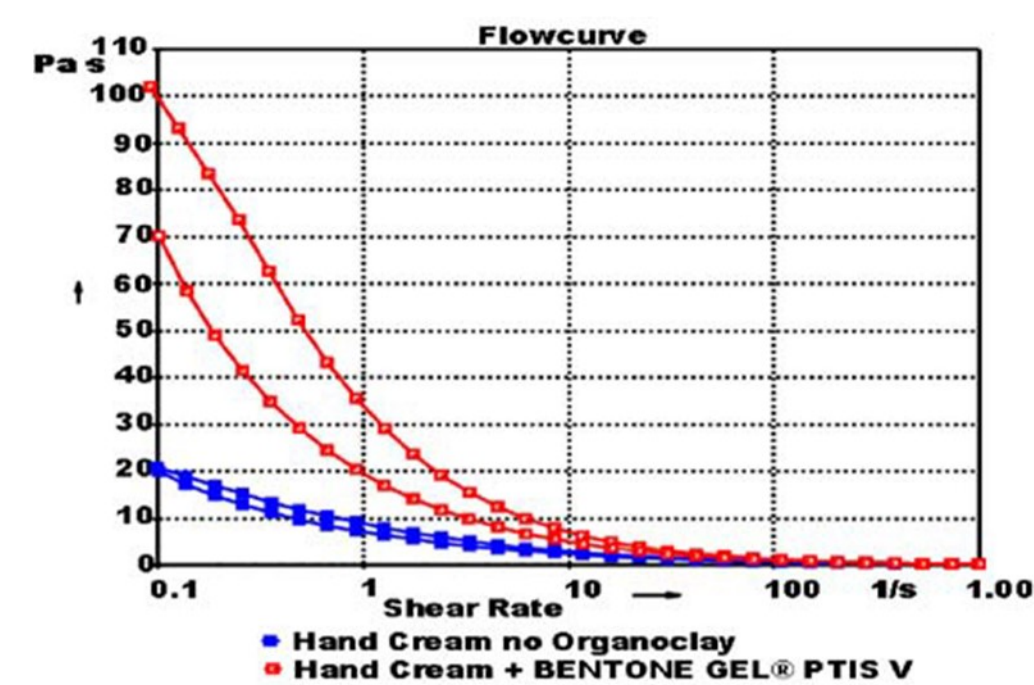
BENTONE GEL® systems are optimized dispersions of fully activated non-animal origin hectorite organoclay, in cosmetic solvents. They deliver a combination of benefits in a single, easy to use product. BENTONE GEL® provides cushioning emollience, long lasting lubricious skin feel, high pigment wetting and glossy films. They also deliver rheological benefits for oil based and emulsion systems, which leads to enhanced product stability, increased viscosity, superior suspending capabilities, a rich texture and smooth skin feel, better spreading properties and thixotropic flow characteristics.

EFFICACY DATA

The addition of BENTONE GEL® gives an increase in the low shear viscosity and the thixotropy of the test cream below. This greater thixotropy accounts for the improved rub in properties of the cream with BENTONE GEL®.

Hand Cream Test Formula

PHASE	Ingredient	% w/w
A	BENTONE GEL® PTIS V	7.00
	Prunus Amygdalus Dulcis (Sweet Almond) Oil	8.00
	PPG-2 Myristyl Ether Propionate	6.00
	Stearic Acid	1.50
	Cetearyl Alcohol	1.50
	Dimethicone, 200cs	1.00
B	BENTONE® LT	1.50
	Deionised Water	68.70
C	Sucrose Cocoate	1.50
	Panthenol	0.20
	Tetrasodium EDTA	0.10
	D	Hydrolyzed Keratin
Phenoxyethanol		1.00



In a lip gloss system, BENTONE GEL® GTCC V offers the emollient effect of caprylic/capric triglyceride along with the added creamier and softer application properties, improved stability and better pigment dispersion achieved with hectorite organoclay. The difference in viscosity and thixotropy achieved when BENTONE GEL® GTCC V is added can be seen in the graphs below. The lipgloss with BENTONE GEL® GTCC V is shown to be stable throughout the angular frequency range, whereas the sample without the gel indicates an unstable product, due to phase changes which are seen to appear in this diagram. The sample with no BENTONE GEL® undergoes phase changes at about 20°C, indicating instability above this temperature. The sample with BENTONE GEL® GTCC V appears to be stable from 10-80°C.

There is dramatic phase separation. The water and oil phases are not able to disperse properly with each other. The sample with BENTONE GEL® shows a perfectly formed water in oil lip gloss, with good pigment dispersion and a smooth finish.

Water in Oil Lip Gloss

PHASE	Ingredient	% w/w
A	BENTONE GEL GTCC V	20.00
	Ricinus Communis (Castor) Oil	32.50
	Sucrose Tetrastearate Triacetate	5.00
	COD 8006 (Castor Oil and CI77491)	3.00
	Colorna Glitter Bordeaux	2.50
	COD 8008 (Castor Oil and CI77891)	1.00
	Propylparaben	0.20
	B	Deionised Water
Glycerin		5.00
Methylparaben		0.20

