Rheology Modifier

Activsoft S

INCI Name: Cyamopsis Tetragonoloba (Guar) Gum

CAS No.: 9000-3-0

Activsoft S is a naturally derived polymer from the guar bean plant, designed for use in personal care products. It is a non-derivatized polymer developed from the ground endosperm of *Cyanopsis tetragonoloba.* Activsoft S displays excellent viscosity building properties in aqueous formulations and also functions as a foam booster and stabilizer for most common high-foaming surfactant systems.

Formulating with Activsoft S is an economical way to boost foam and increase viscosity in applications such as shampoos, conditioners, body washes, styling products, and creams and lotions.

Activsoft S is naturally derived from the guar bean plant.

Surfactant Compatibility

Anionic, cationic, nonionic and amphoteric

Recommended Use Levels

For thickening – 0.2 - 0.8%

For foam boosting – 0.05 - 0.1%

Package Size

Activsoft S is sold in 50 pound Kraft paper bags.

TYPICAL PROPERTIES

Not intended for use in preparing specifications

Appearance (dry)	Off white to light yellow free-flowing powder
% moisture	12 maximum
pH (1% solution)	5.0 – 6.5
Viscosity (1% @ 2 hours)	5000-6500
Particle size US mesh 200	99%
Particle size US mesh 300	20%
Plate count, cfu/g	50 maximum (<10 typical), tentative
Mould, cfu/g	50 maximum (<10 typical), tentative
Yeast, cfu/g	50 maximum (<10 typical), tentative

innospec

Suggested Formulations: Skin Care, Hair Care

Moisturizing Lotion AC082

		Tradename (Supplier)	% w/w
A	Water		q.s to 100
	Trisodium Ethylenediamine Disuccinate	Natrlquest E30 (Innospec)	0.10
	Glycerin	Glycerin (Rita Corporation)	2.50
	Cyamopsis Tetragonoloba (Guar Gum)	Activsoft S (Innospec)	0.50
	Citric acid solution (50%)		qs
B	C12-15 Alkyl Benzoate (and) Dipropylene Glycol Dibenzoate (and) PPG-15 Stearyl Ether Benzoate	Finsolv® TPP (Innospec)	10.00
	Ethylhexyl Benzoate	Finsolv® EB (Innospec)	4.00
	PEG-20 Stearate	Cerasynt 840 (ISP)	3.00
	Glyceryl Stearate (and) Laureth-23	Cerasynt 945 (ISP)	2.50
C	Sodium Polyacrylate (and) Hydrogenated Polydecene (and) Trideceth-6	Rapithix A 60 (ISP)	0.60
D	Preservative	Germaben II-E (ISP)	qs

Preparation Procedure

1. Start to heat to 75°C and add and mix ingredients of phase A in deionised water; adjust pH to hydrate the guar.
2. Add and mix the oil phase (B) into the water phase at 75°C.
3. Homogenise the resulting emulsion until smooth and glossy.
4. Start to cool down and add and mix ingredients C and D, one at a time below 50°C.
5. Continue to mix until below 25°C.

.

Properties

Appearance	White lotion
pH	5.5 - 6.0
Viscosity*	2,000 - 5,000 cps
Stability	Passed 1 month at 45°C

* Brookfield DV-E @5 rpm, 25°C, T-B spindle

Iselux™ Sulfate-Free Facial Cleanser AC141a

	INCI Ingredients	Tradename (Supplier)	% w/w
A	Water		q.s.
B	Sodium Chloride		4.00
C	Guar Hydroxypropyltrimonium Chloride	Activsoft C-17 (Innospec)	0.20
D	Disodium Cocoamphodiacetate	Miranol C2M Conc. N.P. (Rhodia)	7.50
E	Sodium Methyl Cocoyl Taurate	Pureact WS Conc. (Innospec)	7.50
F	Cyamopsis Tetragonoloba Guar Gum	Activsoft S (Innospec)	0.35
	Glycerin		1.00
G	Sodium Lauroyl Methyl Isethionate	Iselux™ LQ-CLR-PE (Innospec)	30.00
H	Cocamide MEA	Aminol CM Flakes (Innospec)	3.50
I	Cocamidopropyl Betaine	Mirataine BET C-30 (Rhodia)	10.00
J	C12-15 alkyl benzoate (and) Dipropylene Glycol Dibenzoate (and) PPG-15 Stearyl Ether Benzoate	Finsolv® TPP (Innospec)	5.00
K	Preservative, dye, fragrance		q.s.
L	Citric acid solution (50%)		q.s. to – pH 5.0-5.6

Preparation Procedure

1. Dissolve Sodium Chloride in D. I. Water system.
2. With smooth mechanical agitation slowly blend Activsoft C-17 in water system. Mix until completely dispersed and uniform.
3. Slowly blend Miranol C2M Conc. into system. Mix until uniform. Warm system to 40-45ºC with smooth mechanical agitation.
4. Slowly blend Pureact WS CONC. into heated system and mix until completely dissolved.
5. In a separate mixing vessel, combine Activsoft-S and Glycerine. Mix into a soft slurry that is completely uniform. Slowly blend this pre-mix slurry into main system and mix until uniform.
6. Slowly blend Iselux™ LQ-CLR-PE into system. Mix until uniform.
7. Slowly blend Aminol CM FLAKES into system. Mix until uniform. Remove heat.
8. Slowly blend Mirataine BET-C-30 into system. Mix until uniform.
9. Slowly blend Finsolv® TPP into system. Mix until uniform.
10. Add compatible fragrance, dye(s) and preservative.
11. Adjust pH of system to 5.0-5.6 with Citric Acid Solution (50% Aq.) as required. The system should thicken noticeably with the pH adjustment. Mix for at least 30 minutes to reach final consistency.

For further information, please email your region:
Americas: americas-ac@innospecinc.com Europe, Middle East and Africa: emea-ac@innospecinc.com Asia-Pacific: aspac-ac@innospecinc.com www.innospecinc.com
 Issue No. 4 /2010

innospec