Sappi Biochemtech BV



Sappi Biochemtech BV

Biesenweg 16 6211AA, Maastricht, The Netherlands Tel : +31 43 38 22564 Email: <u>Valida@sappi.com</u> Website: <u>www.sappi.com/valida</u> Version: 2.2

Valida S+ CS-8

PRODUCT DESCRIPTION

Fibrillated cellulose in water suspension. Valida S+ CS-8 is derived from wood pulp that has been sourced from sustainably managed forests. The product is a multifunctional bio-based additives which can be used in aqueous systems, oil-in-water emulsions, serums, creams, as well as coloured formulations.

INCI name: Cellulose + Cellulose Gum CAS No. 9004-34-6 and 9004-32-4 COSMOS-approval

SPECIFICATION

Parameters	Value	Unit	Test method	
Product Form	Paste		Visual	
Colour	White		Visual	
Solid Content	7.5 - 8.5	%	ESTM 9302	
Viscosity of 1.0% at 100s ⁻¹ , 20 °C	≥ 700	mPa.s	ESTM 5303	
pH of 1.0% suspension	4.0 - 7.0		pH Meter	
Heavy metals as Pb	<20	mg/kg	ESTM 3039-1	
Arsenic as As	<2	mg/kg	ESTM 3039-1	
Total bacteria count	<100	cfu/g	ISO 4833-2	
Total mold and yeast	<100	cfu/g	ISO 21527-1	
Preservative	Yes			

ENVIRONMENTAL INFORMATION

Valida S+ CS-8 is biodegradable and harmless.

Sappi Biochemtech BV

sappi Valida

DISPERSION GUIDELINES

A good dispersion of Valida S+ CS-8 is critical to utilize its full benefits. It is pivotal that Valida is pre-dispersed in the water phase according to the guidelines in the table below, before adding other ingredients.

Dispersion guideline for Valida S+ CS-8:

Dispersion Equipment	Speed (rpm)	Batch size (grams)	Dispersion time (min)	Vision check	
Ultra Turrax (T25)	10000	400	5	A well dispersed suspension will show thickening effect with a creamy appearance.	
Dispermat Dissolver	2000	400	30	Visible lumps or aggregates are indication of an undispersed suspension.	

DOSAGE GUIDELINE

The optimal dosage of Valida S+ CS-8 in a formulation depends on the required functionality, as well as the nature of the other ingredients in the formulation. Note that adding Valida S+ CS-8 will not result in an immediate thickening effect. The primary functionality of Valida S+ CS-8 is stabilization at low viscosity. A combination of Valida S+ CS-8 and a thickener is recommended when a 'gel-like' system is required.

Valida Grade	Composition (wt.%)	Valida S+ CS-8 /Total Formulation (g/g)	Active content (g/g Formulation)	The amount of water introduced to the formulation by Valida (g/g)
	8 ± 0.5% Cellulose 92 ± 0.5% Water	1.0%	0.08%	0.92%
		3.0%	0.24%	2.76%
		5.0%	0.4%	4.6%
		12.5%	1.0%	11.5%

DELIVERY FORM

Packed in pouches (10 kg net weight), which will be transported in cardboard boxes (2 pouches per box, 20 kg net weight) on pallets.

STORAGE STABILITY

Recommended storage condition: ambient or lower, and avoid freezing and direct exposure to sunlight. Provided stored as advised, the product has a shelf life of 18 months from date of production. Once open, pouches containing Valida S+ CS-8 should be re-sealed to avoid moisture loss and used within 3 months.