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Version: 2.4

Valida S+ CS-3

PRODUCT DESCRIPTION

Fibrillated cellulose in water suspension. Valida S+ CS-3 is derived from wood pulp that has been sourced from sustainably managed forests. The product is a multifunctional bio-based additive 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	Gel		Visual
Colour	White		Visual
Solid Content	2.5 - 3.5	%	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-3 is biodegradable and harmless.

DISPERSION GUIDELINES

A good dispersion of Valida S+ CS-3 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-3:

Dispersion Equipment	Speed (rpm)	Batch size (grams)	Dispersion time (min)	Vision check
Dispermat Dissolver	1000	400	15~30	A well dispersed suspension will show thickening effect with a creamy appearance.

DOSAGE GUIDELINE

The optimal dosage of Valida S+ CS-3 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-3 will not result in an immediate thickening effect. The primary functionality of Valida S+ CS-3 is stabilization at low viscosity. A combination of Valida S+ CS-3 and a thickener is recommended when a 'gel-like' system is required.

Valida Grade	Composition (wt.%)	Valida S+ CS-3 /Total Formulation (g/g)	Active content (g/g Formulation)	The amount of water introduced to the formulation by Valida (g/g)
Valida S+ CS-3	3 ± 0.5% Cellulose 97 ± 0.5% Water	3%	0.09%	2.91%
		8%	0.24%	7.76%
		12%	0.36%	11.64%
		16%	0.48%	15.52%

DELIVERY FORM

Packed in pouches (10 kg net weight), which will be transported in cardboard boxes (2 bags per box, 20 kg net weight) on pallets. Alternatively, Valida S+ CS-3 can be delivered in IBCs.

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 24 months from date of production. Please note, a thin layer of water on top of the product surface might occur during transportation, storage or between use. If this water separation phenomenon is observed, please recirculate or mix the product inside the package before use.