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 Version: 2.0

Valida S+

PRODUCT DESCRIPTION

Fibrillated cellulose in water suspension. Valida S+ 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

CAS No. 9004-34-6

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	≥850	mPa.s	ESTM 5303
pH of 1.0% suspension	6.0-8.0		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+ is biodegradable and harmless.

INFORMATION FOR HANDLING VALIDA S+

Valida S+ Dispersion Guidance:

A good dispersion of Valida S+ is critical to utilize its full benefits. We recommend to introduce Valida S+ at an early process step, preferably dispersing Valida S+ together with other fillers or pigments via grinding or high shear mixing.

Table. Redispersion guideline for Valida S+:

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. Visible lumps or aggregates are indications of an undispersed suspension.
Dispermat Dissolver	2000	400	30	

DOSAGE GUIDELINE

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

Valida Grade	Composition (wt.%)	Valida S+ /Total Formulation (g/g)	Active content (g/g Formulation)	The amount of water introduced to the formulation by Valida (g/g)
Valida S+	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

Vacuum plastic bags in cardboard boxes (2 bags 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, containers or bags containing Valida S+ should be re-sealed to avoid moisture loss and used within 3 months.