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Soltellus™ Polymer 2101S

AUTODISH

INCI: Sodium polyaspartate, CAS #94525-01-6
Regulatory: TSCA, DSL, REACH
DID #2606

Soltellus™ Superior Shine

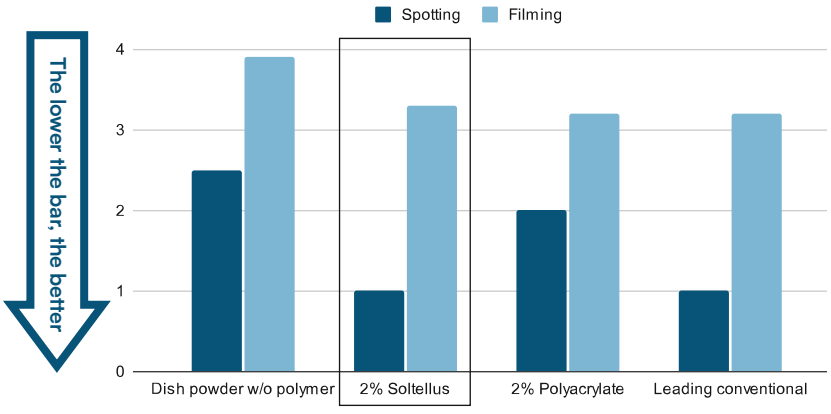
Soltellus™ is a biodegradable, anionic polymer produced by polymerization of aspartic acid with multifunctional benefits that can be used as a replacement for polyacrylate in automatic dishwasher detergent. In addition to anti-filming and anti-spotting, it has dissolution, sequestering, and anti-scaling properties, and is on the EPA's Safer Chemical Ingredient list.

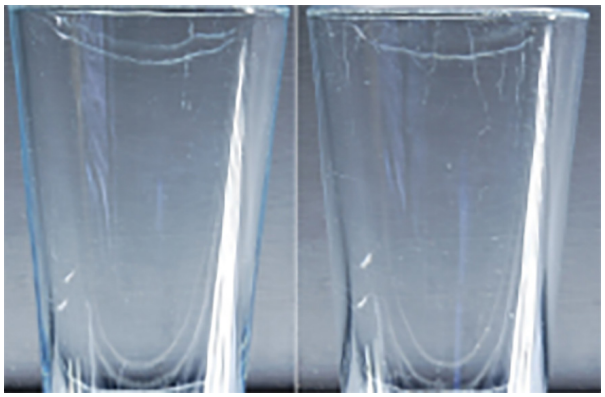
Applications	Benefits	Sustainable benefit
• Automatic dishwashing detergent • Dishwasher booster • Dishwasher cleaner	• Shine • Prevents filming • Prevents spotting • Performs in hard water • Anti-scaling • Water softening	• Biodegradable • Polyacrylate substitution

Performance

Soltellus™ prevents spotting and filming in dishwasher detergent in all water hardness conditions, and also performs at parity with the leading brand on spotting and filming in hard water.

Dish Performance in Hard Water





Leading Conventional 2% Soltellus™

ASTM D3556-85, 2 replicates, 1-cycle, Hard water: 330 ppm $CaCO_3$, Tandell Research Lab
Spotting: 1 = no spotting, 2= Spot at random; Filming: 3.2-3.3 = slight, 4=moderate

IN ADDITION TO SHINE, SOLTELLUS™ POLYMER:

- effectively dissolves hard water minerals preventing their deposition on glass, cutlery and china
- Soltellus™ dissolution's power outperforms non biodegradable polyacrylate and biodegradable sequestrants
- has better calcium ion sequestering capacity than polyacrylate and most biodegradable sequestrants
- replaces non biodegradable polyacrylate in automatic dishwasher detergent

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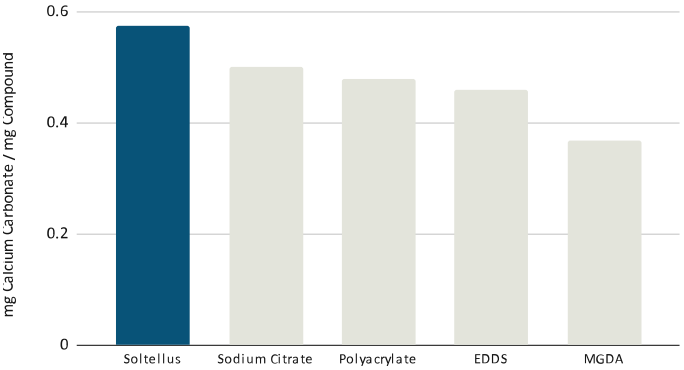
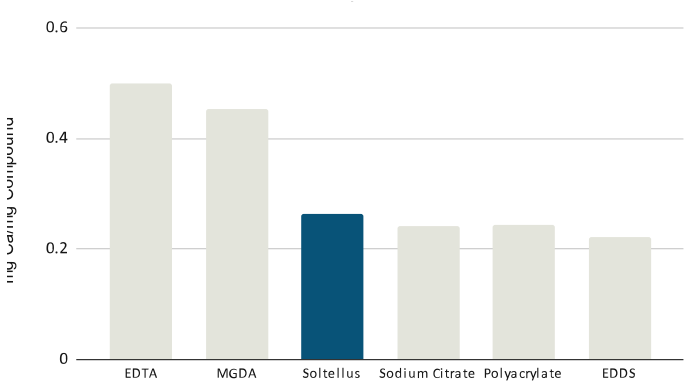
Calcium Carbonate Dissolution



13% better than Sodium Citrate
17% better than Polyacrylate
36% better than MGDA

Calcium Sequestration



7% better than Polyacrylate

Calcium carbonate dissolution: Lygos internal lab testing via turbidity measurement at pH 9. Calcium Sequestration: Lygos internal lab testing optically using a calcium ion selective electrode at pH 9. EDTA: Ethylenediamine tetracetic acid; EDDS: Ethylenediamine, disuccinic acid; MGDA: methylglycinediacetic acid trisodium salt

Physical and Chemical Properties

Parameter	Value
Appearance	Yellow powder
Total actives (%):	92%
pH (40% solution)	6.5-10
Moisture content	<8%

ECO-FRIENDLY
Biodegradable (OECD 301B)

PH STABILITY
Stable

STORAGE
Store in a closed container in a cool dry area, keep away from direct light.

Available in

Soltellus™ 2101S	Sodium polyaspartate	Low Color Powder (92% actives)