

# Soltellus™ Polymer 2201S

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

## Soltellus™ Superior Shine

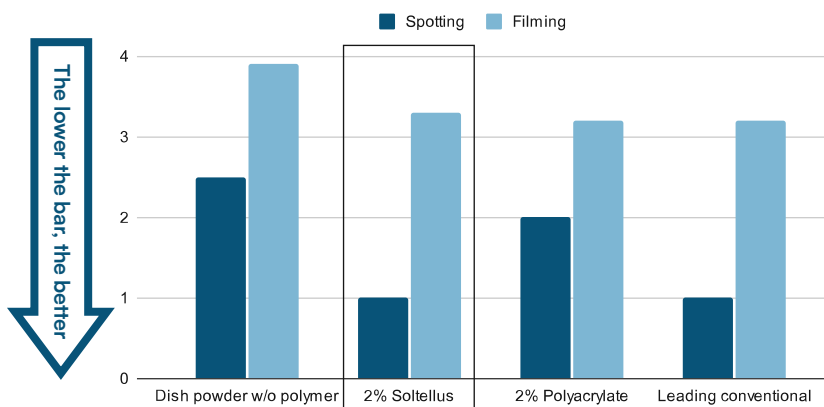
Soltellus™ is a biodegradable, anionic polymer produced by polymerization of aspartic acid with multifunctional benefits that can be used as a replacement for polyacrylate in automatic dishwasher detergent. In addition to anti-filming and anti-spotting, it has dissolution, sequestering, and anti-scaling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

Applications	Benefits	Sustainable benefit
<ul style="list-style-type: none"> <li>Automatic dishwashing detergent</li> <li>Dishwasher booster</li> <li>Dishwasher cleaner</li> </ul>	<ul style="list-style-type: none"> <li>Shine</li> <li>Prevents filming</li> <li>Prevents spotting</li> <li>Performs in hard water</li> <li>Anti-scaling</li> <li>Water softening</li> </ul>	<ul style="list-style-type: none"> <li>Biodegradable</li> <li>Polyacrylate substitution</li> </ul>

## 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

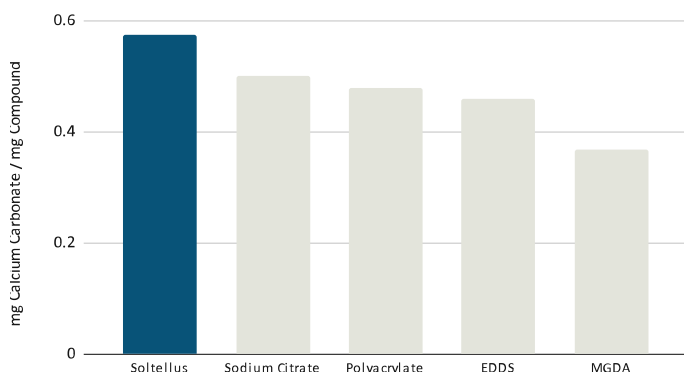
2% Soltellus™

ASTM D3556-85, 2 replicates, 1-cycle, Hard water: 330 ppm CaCO<sub>3</sub>, 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:

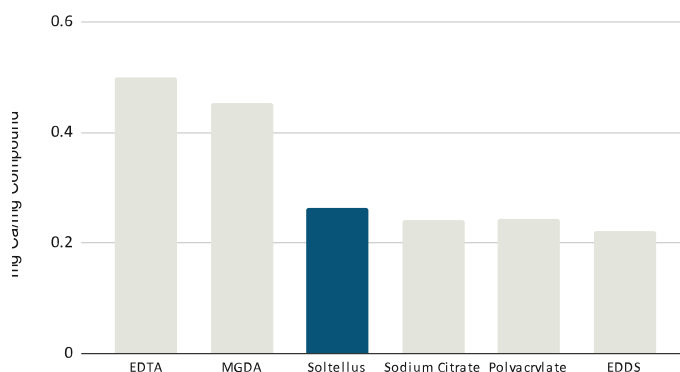
- effectively dissolves hard water minerals preventing their deposition on glass, cutlery and china
- Soltellus™ dissolution's power outperforms non biodegradable polyacrylate and biodegradable sequestrants
- has better calcium ion sequestering capacity than polyacrylate and most biodegradable sequestrants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

## 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 (%):	>85%
pH (40% solution)	6.5-10
Moisture content	<10%

### 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™ 2201S	Sodium polyaspartate	Low Color Powder (85% actives)
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