

# Soltellus™

## FORMULATION GUIDELINES

### Recommended Dosage

Application	Soltellus 2101S (Solid)	Soltellus 2101L (Liquid)
<b>LAUNDRY DETERGENT</b> Laundry Unit Dose Laundry Detergent (40-50 mL) Concentrated Laundry Detergent (20-25 mL) Ultra Concentrated Laundry Detergent (10-15 mL)	0.45g/dose 1-2% 2-4% 4-8%	0.90g/dose 2-4% 4-8%
<b>AUTOMATIC DISHWASH</b> Dishwasher Unit Dose (18 g)	0.36g/dose or 1.5-2.5%	
<b>CLEANERS</b> Windows, Floor All Purpose Cleaner, Bathroom	0.5% 1.0%	1.0% 2.0%

### Color

Formula with added Soltellus remains colorless with

- Liquid: 1% Soltellus 2101S or 2% Sotellus 2101L
- Powder: 2% soltellus 2101S

### Recommended pH

- Liquid, pH between 7-12.
- Powder: After dissolution, would be stable at least 1 week at pH 3-6 (dilute at home) and over the shelf life at pH 7-12

### Heat Stability in Production

- Liquid: Stable at 90°C at pH 7-12 for up to 1 week.
- Powder: Stable up to 150°C for 2 hours.

### Formulation

- Highly Water soluble
- Cold process where no heat is needed
- Add the polymer toward the end when the pH is between 7-12.

### Compatibility

Soltellus is an anionic polymer, it is compatible with most ingredients but not recommended for use with cationic ingredients.

### Other Considerations

Soltellus enables anionic surfactants to deliver their full potential by sequestering hard water minerals that otherwise reduce their performance. This is especially noticeable in enzymatic formulas where significant cost reduction can be achieved by reducing the amount of surfactants. Superior performance is achieved in enzymatic laundry detergent formulas with only 4-5% anionic surfactants.

### Storage Conditions

Once opened, keep in a dry place away from humidity and direct light.