

Itaconix® TSI® 322

New, uncompromising plant-based choice for multi-functional scale inhibition

Use Itaconix® TSI® 322 to eliminate trade-offs between sustainability and top scale inhibition. Itaconix® TSI® 322 is plant-based and has excellent calcite and mineral dispersant properties. Stable across wide temperature and pH ranges, Itaconix® TSI® 322 is easy to handle and tablet. Suitable for detergent, and water treatment applications, Itaconix® TSI® 322 is the sustainable alternative to polyacrylates, phosphates, and phosphonates.

Applications:	Advantages:	Physical & Chemical Properties	
<ul style="list-style-type: none"> • Automatic dishwashing detergents • Hard surface cleaners • Industrial cleaners • Water treatment 	<ul style="list-style-type: none"> • Superior calcium and magnesium chelation and scale inhibition • No trade-off in sustainability and performance • Multi-functional chelation, dispersion, scale inhibition • More compact dosing • Approved for Safer Choice • Less metal and glass corrosion • Biodegradable • Stable from pH 2 - 14 	CAS#	10526220-22-0
		pH at 10% active	5.2
		Odor	none
		Average molecular weight (Mn)	4300 g/mole
		% Active	85
		Chemical class	Poly(itaconic acid-co-AMPS, sodium salt)
		Appearance	Off-white granules
		Density	700 g/L

Class leading results

Achieve class leading spotting & filming results in comparison to industry brand leaders with the power of Itaconix® TSI® 322 in automatic dishwasher detergent formulations. Create more compact dosing by reducing or removing common builder ingredients with the use of Itaconix® TSI® 322.

Clearer glasses than the leading branded pods

(30 cycle Stiftung Warentest protocol at an independent laboratory)

TSI® 322 in a 12.5g formula Leading Brand A Leading Brand B

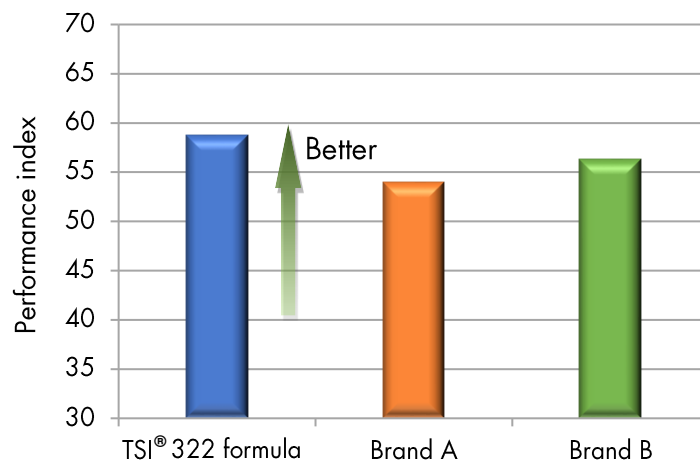


Better spotting & filming scores

Achieve top performance and sustainability using Itaconix® TSI® 322 in combination with sodium citrate in automatic dishwasher detergent formulations.

Independent laboratory testing confirms Itaconix® TSI® 322 improves overall spotting and filming scores in comparison to two leading brands.

Filming score vs leading brands

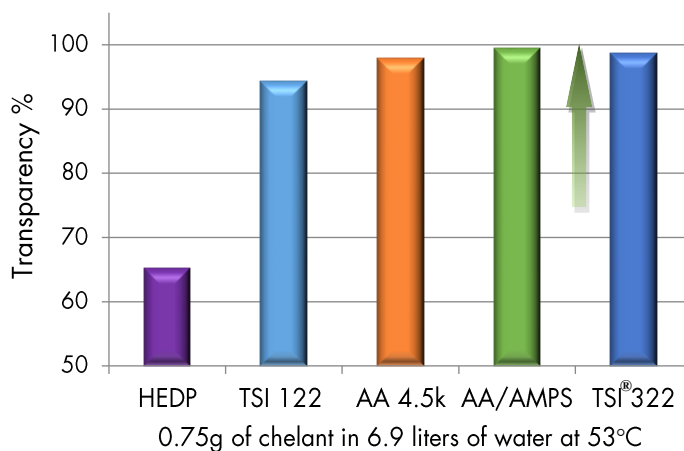


Improved calcium carbonate dispersion

Itaconix® TSI® 322 is plant-based and offers scale inhibition at the levels obtained by leading acylate based dispersant polymers.

Itaconix® TSI® 322 enables the reduction or complete removal of phosphonates, phosphates, amino acetates and polyacrylates from automatic dishwasher detergent formulations.

Dispersion at 300ppm water hardness



Samples upon request

Please email request to: samples@itaconix.com

To request information on ordering quantities and pricing

Please call: +1 (603) 775-4400 or email: sales@itaconix.com



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