# A UNIQUE ADDITIVE FOR IMPROVED CONDITIONING PERFORMANCE

**Colonial Chemical, Inc.**

https://colonialchem.com/

---

## PRODUCT/SERVICE BACKGROUND INFORMATION

Poly Suga®Quat products are unique and innovative conditioning surfactants for the personal care industry. They have very high renewable carbon content, low irritation, and high performance. Poly Suga®Quat products are free of PEG, contain low residual amounts of monomers, and are much milder for eyes and skin as compared to many traditional quaternaries. Poly Suga®Quat products do not build up on hair, can offer excellent combing reduction on both wet and dry hair from shampoos and conditioners, and can enhance the performance of 2 in 1 shampoo.

## WHAT IS THE COMPANY INTRODUCING TO THE MARKET/INDUSTRY?

This poster builds upon previous work which will be reviewed. Colonial Chemical, Inc has previously demonstrated the potential of quaternary substituted alkyl polyglucosides to greatly improve the substantivity of a high molecular weight cellulosic quat (Polyquaternium-10). Through a stepwise approach from dilution complexation through to wet hair combing, we have now demonstrated that in our model system Poly Suga®Quat TM-8610P delivers on the potential to dramatically improve wet combing in practice.

## HOW WILL THIS NEW PRODUCT/SERVICE IMPACT THE INDUSTRY (BENEFITS)?

As consumers seek to minimize their routines and maximize benefits, the need for high quality, efficacious 2 in 1 shampoo is greater than ever but this remains a significant formulation challenge for formulators. Simply increasing high molecular weight quats is not enough, as doing so creates formulation incompatibilities and increases cost dramatically. We demonstrate that with the inclusion of Poly Suga®Quats, and specifically Poly Suga®Quat TM-8610P, we can dramatically improve the performance of a model 2 in 1 shampoo without the cost and clarity tradeoffs typically associated with lesser performing products.