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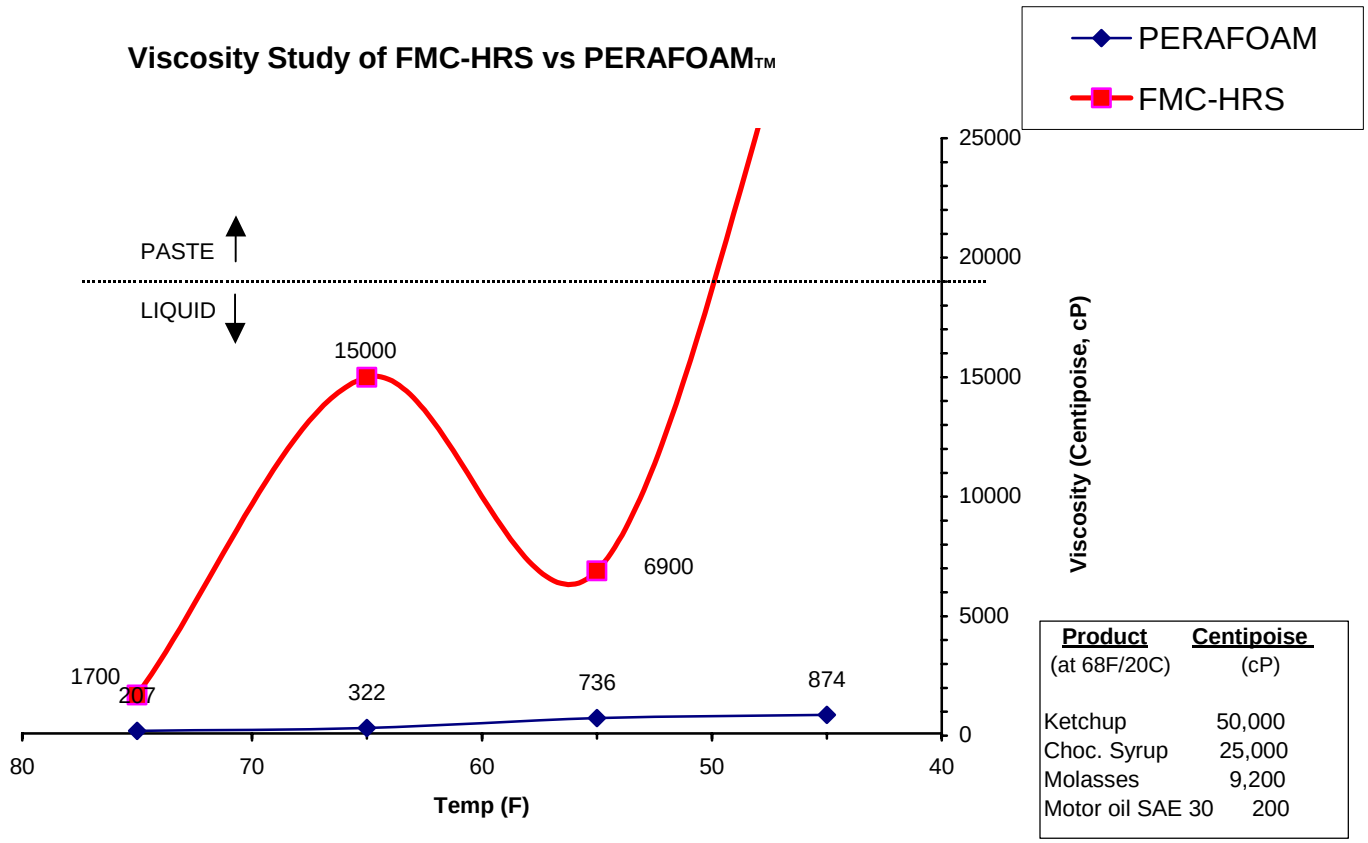
PERAFOAM$_{tm}$ vs. FMC-HRS® Viscosity Comparison

It is well known and accepted in the scientific community that surfactants (from Surface Active Agents) help reduce the polarity of water, and therefore reduces the surface tension (self-adhesion effects). Detergents are also in this class of chemicals. It also is accepted that surfactants speed the penetration and efficiency of cleaners and sanitizers. Therefore, detergents are by definition a cleaner.

Peroxyacetic acid is a very potent and efficient antimicrobial additive that has gained good acceptance in the industrial market, particularly in the food, beverage and dairy industry. In the past few years there has been a trend to add a high foaming surfactant to the peroxyacetic acid. The results are increased sanitizing efficiency due to longer contact times and a reduction in surface tension. These products are added together on-site because a stable PAA-based high foaming EPA approved product has not been introduced to the market.

It is important that the "foam additive" be easily dispensed and mixed with the PAA sanitizer. The preferred method would be automation, whereas the two products are added together simultaneously. One of the key properties of an additive is that it exhibit a viscosity profile that makes the use of the additive convenient for the end-user or the chemical service technician. In this light we performed a series of tests on two such products at different temperatures encountered in the food and beverage environment. The two products are: Enviro Tech's PERAFOAM$_{tm}$, and FMC's HRS®. The results are presented in the graph below.



Product (at 68F/20C)	Centipoise (cP)
Ketchup	50,000
Choc. Syrup	25,000
Molasses	9,200
Motor oil SAE 30	200