Technical Data Sheet

4 January 2019

Product: **KLEEN & CARE ANTI BACTERIAL HAND WASH**

Description: **Liquid Hand Soap – Anti Bacterial/Pearl**
Used as a Liquid Hand Dispenser Soap.
This pour-able liquid concentrate consists of Anionic, Amphoteric & Non Ionic surfactants, Colour, Fragrance, Pearliser, Water Conditioners, Anti Bacterial sterilizers and Preservative

Active Content: Surfactant 61%

Form: Heavy Liquid

Colour: Pearly Aqua Marine (Blue/Turquoise), Opaque

Odour: Fresh/Spicy

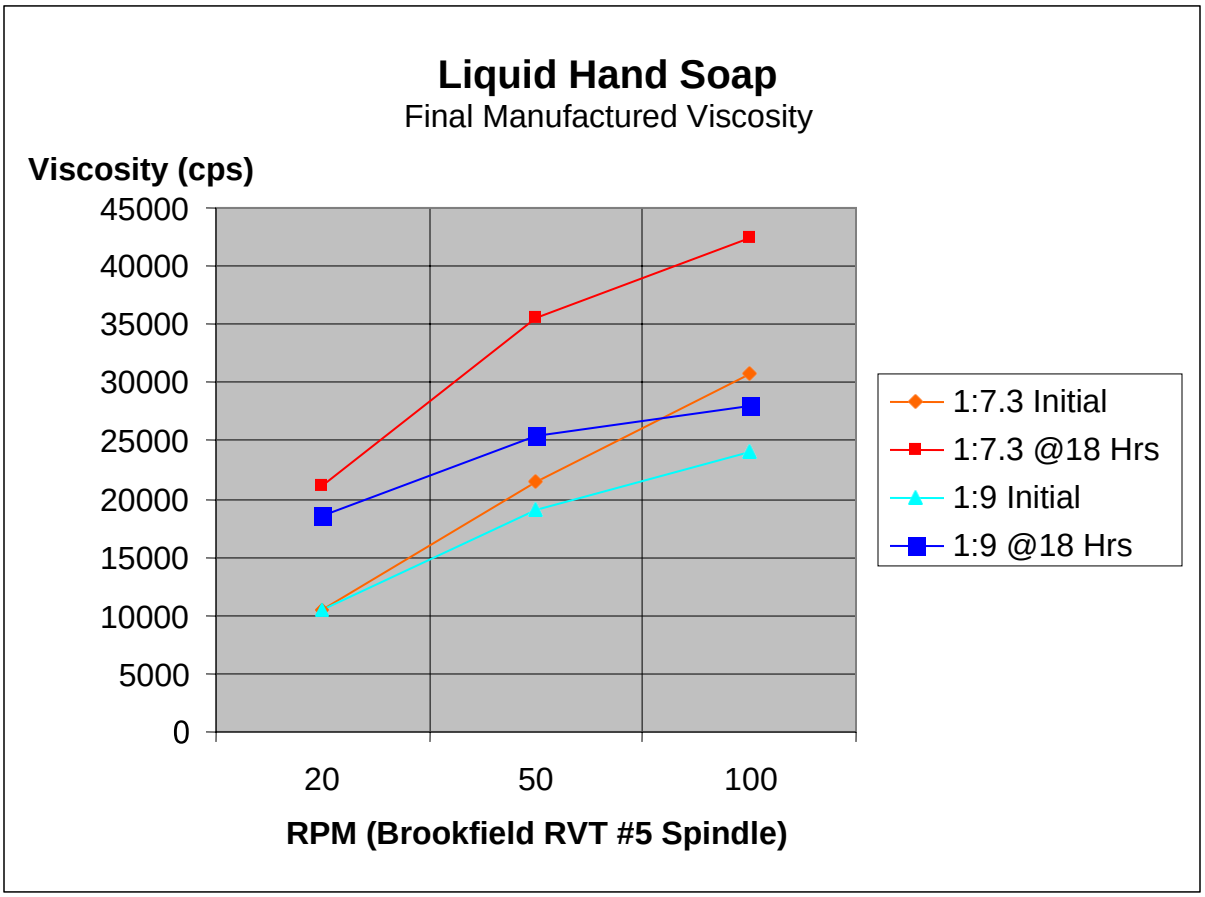
pH: 6.5 – 7.5

Viscosity: 8 500cps @ 25°C Brookfield RVT #6 Spindle @ 5 RPM

Precautions: May cause irritation due to high concentration.

Handling: Non-Flammable. Keep containers closed to prevent ingress of water.
Due to the highly concentrated nature of the product it is recommended that processing staff wear gloves, eye protection & respiration apparatus when handling the raw concentrate.

finished Product – Viscosity Analysis



A common habit of literally every consumer is to judge the quality of a product, such as a Liquid Hand Soap, by its viscosity (thickness). Ironically, it is very easy these days to create a vastly more powerful product with a viscosity like that of water, as much as it is possible to make plain water as thick as a Liquid Hand Soap. And unfortunately the latter situation does occur, with many low quality products using auxiliary thickeners to hide the fact that they don't contain sufficient active material. Building stable and acceptable viscosity into a Liquid Hand Soap has long been a problem that has plagued the manufacturers of economy products. The reason for this is that they rarely understand the interactions of the various ingredients with respect to their contribution to the viscosity of the end product. It is also true to say that some systems use more active ingredient than may be necessary, in order to guarantee a suitable and stable viscosity - this is obviously an unnecessary expense. With many systems, the final addition of salt (to increase the viscosity) is a very delicate issue. It is at this point that the entire batch can be ruined by the addition of too much salt, too little often appears good for a while but then slips backwards to a watery product some days later. We believe we've taken the guesswork out of the equation! The above graphs indicate that our product, even at the lower dilution of 1:9, yields viscosities 15% higher than is required. This test was conducted to establish how high the viscosity could be driven and how much salt the system could tolerate before collapsing. Despite an almost 50% over dosage of salt the system simply yielded a very high viscosity that actually increased further after 18 hours! The results obtained indicate that our product will reliably deliver suitable and stable viscosity, and further tolerate an unusually high margin of error. These factors substantially reduce the manufacturing risks and simplify the process.