

SF-1

TECHNICAL DATA SHEET

PRODUCT INFORMATION:

AQUAPOL® SF-1 is lightly cross-linked acrylic polymer 30% dispersion. AQUAPOL® SF-1 polymer is an acrylic emulsion having ability to suspend, stabilize, thicken and enhance the appearance of high surfactant based cleansing products. It is mainly used for clear formulation containing high levels of Surfactants. AQUAPOL® SF-1 also enhances the pearlescent appearance of surfactant formulation. AQUAPOL® SF-1 is a rheology modifier which provides benefit of dispersion to surfactant bases cleansing products.

INCI NAME: ACRYLATE COPOLYMER

PHYSICAL PROPERTIES:

APPEARANCE:	Milky White Dispersion
ODOR:	Low Characteristic Odor
TOTAL SOLIDS:	30% w/w
pH:	3
VISCOSITY:	10 mPa.s
RESIDUAL ETHYL ACRYLATE:	<1.0 ppm

BENEFITS:

- Easy to Use Liquid Form
- Suspension and stabilization
- Clear Formulation
- Thickening and flow control
- pH Flexibility
- Synergistic Thickening with Salt
- Enhance Pearlescent appearance

STORAGE & HANDLING:

PACKAGING:	60 kg net in HDPE carboy
STORE TEMPERATURE:	5-30 °C, Do Not Freeze.
SHELF LIFE:	12 months

APPLICATION:

AQUAPOL® SF-1 provides efficient suspending, stabilizing and thickening properties to surfactant based cleansing products. It provides benefit in terms of cost effectiveness as well as easy to use product.

It can be used for many formulations like

- Clear Shampoo and Bath Gel
- Clear Hand Sanitizer
- Clear Hand Wash
- Facial Cleanser
- Skin Scrubs
- Clear Body wash

USAGE RECOMMENDATION:

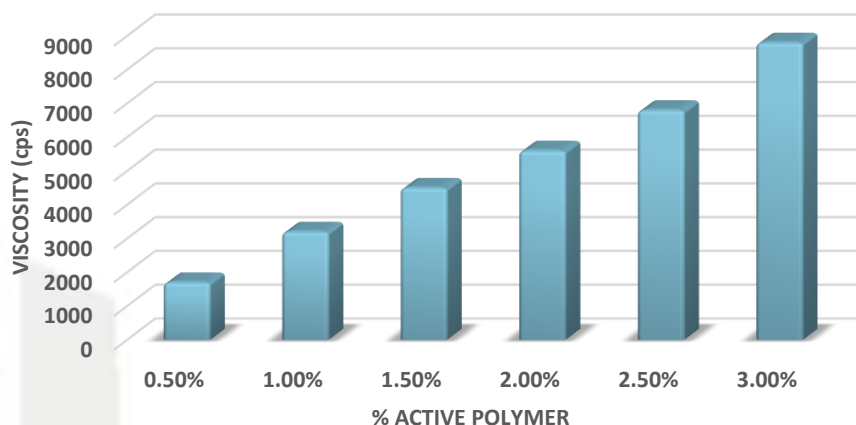
The minimum usage level of AQUAPOL® SF-1 in surfactant based products is 5.0% dispersion (1.5% DS). For maximum effectiveness 15-25% active surfactants can be use. Clear products are easily formulated at pH 6.5 to pH 6.8. Clear products containing no salt and low surfactant actives typical required 8-10% w/w dispersion (2.4-3.0% DS). AQUAPOL® SF-1 also works with salts. Low level of Sodium chloride increases viscosity when used at higher level may increase turbidity. AQUAPOL® SF-1 enhance the appearance and visual stability of pearlizing agents like mica, in surfactant based products.

ORDER OF ADDITION:

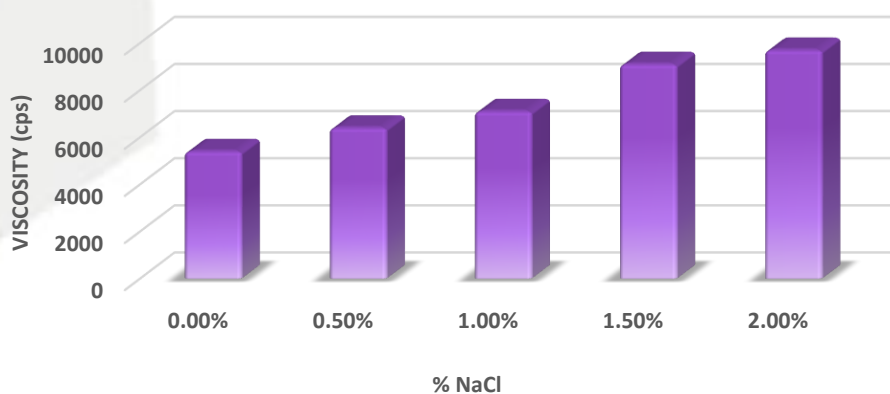
- STEP 1. Add AQUAPOL® SF-1 to D.M. water required for formulation.
- STEP 2. Add primary surfactants.
- STEP 3. Neutralize to Ph OF 6.5 – 6.8 with sodium hydroxide.
- STEP 4. Add specialized surfactants.
- STEP 5. Add conditioning, supportive and additional ingredients.
- STEP 6. Add fragrance, colors or dyes as required.

TECHNICAL DATA:

VISCOSITY vs % ACTIVE POLYMER



EFFECT OF SALT



EFFECT OF TEMPERATURE

