



## Consumer Solutions

# ACULYN™ 2051 Rheology Modifier

Simply pour and mix. All-in-one product combines stable thickening and emulsifying properties with the smooth, non-greasy and non-sticky aesthetics associated with silicones.

### Applications

ACULYN™ 2051 Rheology Modifier is a multifunctional solution that saves time and money. It can be used in a wide range of personal care applications:

- Skin care
- Sun care
- Rinse-off and leave-in hair conditioners
- Hair styling products

### Compatibility

ACULYN™ 2051 Rheology Modifier is compatible with:

- A wide range of mineral and organic oils
- Elastomer blends, gum blends and other difficult-to-emulsify silicones
- Esters
- Sunscreens
- Vitamins
- Formulations with high solvent content



### Aesthetics

ACULYN™ 2051 Rheology Modifier is a thickening polymer emulsified in a base of dimethicone and cyclopentasiloxane, so in addition to the multifunctional benefits described, the silicone carrier provides aesthetic benefits to your formulations:

- Smooth feel
- Non-greasy
- Non-sticky

### Ease of Use

Pour ACULYN™ 2051 Rheology Modifier in the oil phase, add water and mix-gelling is instant. ACULYN™ 2051 Rheology Modifier was designed for cold processing based on simple pouring and mixing. Our thickening agent is a water-in-oil emulsion of aqueous sodium polyacrylate in dimethicone (XIAMETER™ PMX-200 Silicone Fluid 5 cSt). The emulsion also contains two surfactants, a silicone emulsifier (PEG/PPG-18/18 Dimethicone) to stabilize the ACULYN™ 2051 Rheology Modifier and an inverting agent (trideceth-6), which helps

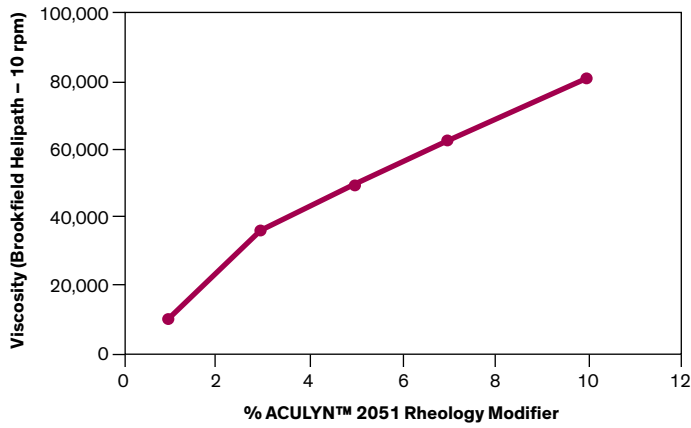
bring the polymer into contact with the aqueous phase of the formulation. When water is added, the polymer expands instantly to thicken and give stability to the preparation. As the formulation thickens, the oil phase ingredients are emulsified and stabilized.

- No neutralization
- No heating
- Efficient use at low levels
- No clumping
- No dusting
- No static electrical charge



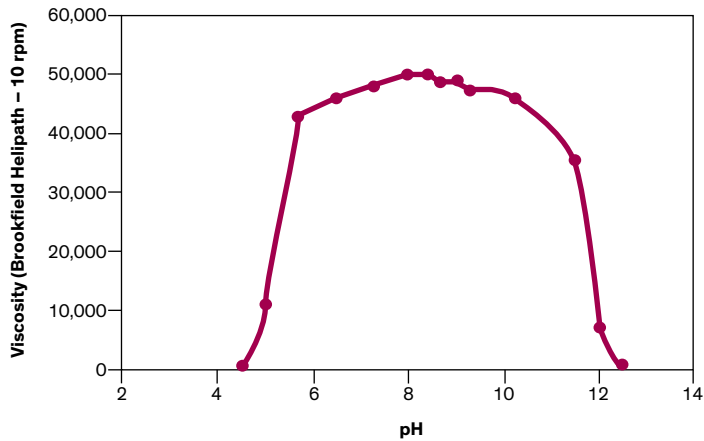
**Adding**  
*Value*  
**to Life**

**Figure 1: Thickening Properties**

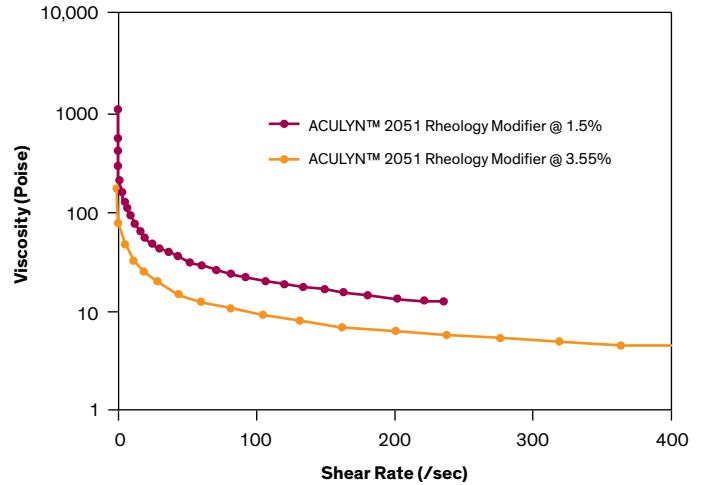


**Figure 2: pH Influence**

(Viscosity of a 5% ACULYN™ 2051 Rheology Modifier aqueous gel vs. pH)



**Figure 3: Rheology Profile**



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