

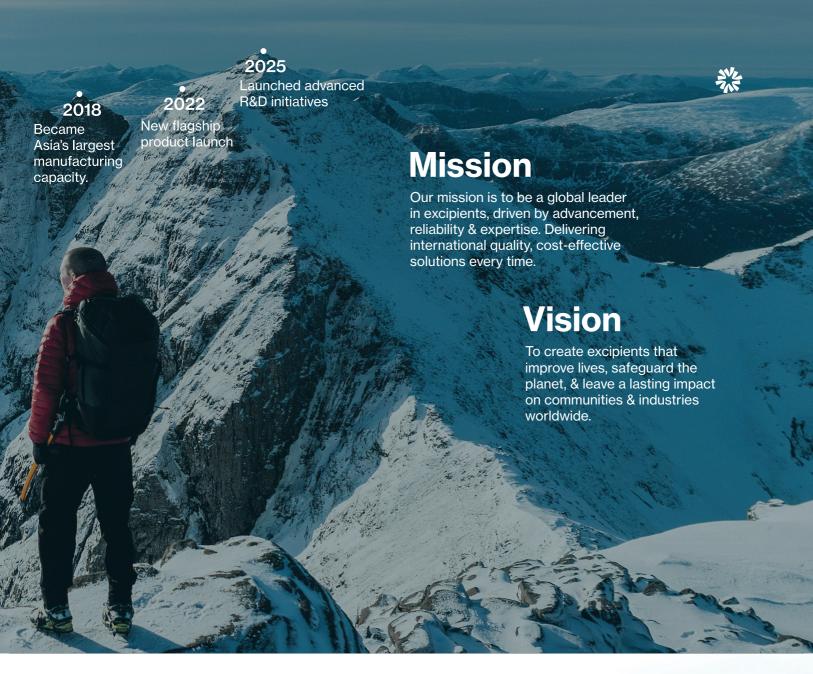
### **AQUAPOL®**

"Transforming formulation with superior thickening and gelling."

AQUAPOL® is a next-generation multifunctional polymer delivering exceptional thickening and gelling performance across cosmetics and pharmaceuticals. Its unique rheology allows formulators to create stable, refined, and consumer-preferred products with ease.

In cosmetics and personal care, texture defines the user experience. AQUAPOL® ensures silky, smooth, and consistent textures in creams, gels, lotions and serums. Its superior suspending and stabilizing capabilities enable uniform dispersion of actives, pigments, and oils, supporting lightweight yet luxurious formulations.

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From high-viscosity creams to transparent gels, AQUAPOL® enhances product aesthetics and performance across skincare, haircare, and beauty applications. Highly efficient at low concentrations and broadly compatible with excipients, it provides robust stability while supporting cost-effective, innovative formulations.



AQUAPOL®

### **AQUAPOL® SF-1**

# Effortless clarity, reliable performance

AQUAPOL® SF-1 (Acrylates Copolymer) is a lightly cross-linked polymer dispersion crafted for high-performance cleansing formulations. This cold-processable anionic, non-associative, alkali-swellable thickener is supplied as a low-viscosity liquid making it convenient to handle and highly efficient from a manufacturing perspective.

Rapid thickening, effortless handling, and outstanding stability in surfactant-rich systems is offered by 30% active content. Beyond viscosity control, it enhances suspension, flow, and product aesthetics delivering both technical precision and consumer appeal.



#### **Advantages:**

INCI - Acrylates Copolymer

Non-associative rheology modifier for precise viscosity control

Delivers excellent clarity in transparent formulations

Works synergistically with surfactants and salts

Easy-to-incorporate liquid form for streamlined processing

Effective suspension of insoluble ingredients (e.g., silicones, beads)

Compatible with a wide range of surfactants and cosmetic solvents

Enhances the visual impact of pearlizing agents

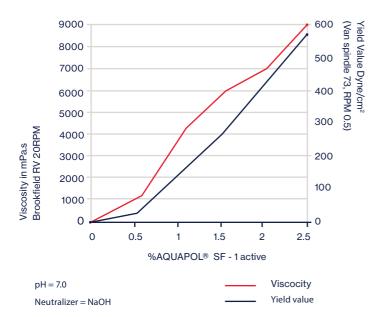
Consistent performance across a broad pH range

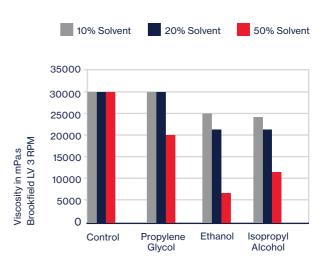
# Relationship of concentration to viscosity and yield stress: AQUAPOL® SF-1

The graph highlights the rheological characteristics of AQUAPOL® SF-1 when dispersed in water and neutralized. With increasing concentration, the polymer shows a smooth and consistent enhancement in both viscosity and yield value.

The rise in viscosity ensures a rich, stable texture, while the increase in yield value indicates improved suspension capacity, preventing settling of actives and maintaining product uniformity. Together, these attributes make AQUAPOL® SF-1 a versatile thickening and stabilizing system suitable for a wide range of cleansing and personal care formulations.







AQUAPOL® SF - 1(% active) = 1.8% Preservative = 0.25% Neutralizer = Sodium Hydroxide pH = 7.5

AQUAPOL® SF-1 also demonstrates excellent compatibility with common cosmetic solvents. At typical use levels, it sustains stability and rheological performance without compromise.

### **AQUAPOL® SF-22**

# Advanced thickening for challenging systems

AQUAPOL® SF-22 (Acrylates/Steareth-20 Methacrylate Copolymer) is a hydrophobically modified alkali-soluble polymer emulsion (HASE) designed for modern formulations. Supplied as a low-viscosity liquid, it is cold-processable and delivers instant thickening upon neutralization. Containing 30% active polymer, it delivers rapid thickening upon neutralization.

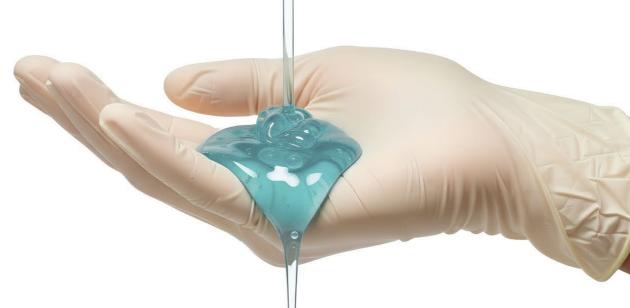
Engineered for sulphate free and difficult to thicken systems, AQUAPOL® SF-22 combines robust rheology with superior clarity, flow control, and stability. Its shear-thinning behavior enhances processability.



#### **Applications**

Shampoos, Body and Face Cleansers, Hair Gels, Lotions & Creams, Foaming Washes, Liquid Soaps, Depilatories.

6 www.vikramthermo.com

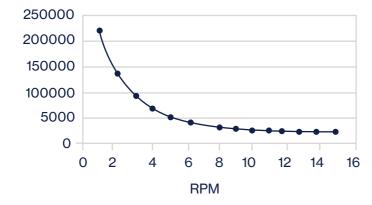


## Superior shear-thinning performance : AQUAPOL® SF-22

Upon neutralization, AQUAPOL® SF-22 forms a clear, viscous gel with a smooth texture and no tackiness. The hydrophobic groups anchored to its polymer backbone play a critical role in imparting pronounced shear-thinning properties, These hydrophobic associations are governed by weak van der Waals forces, which easily disengage under applied shear. As a result, the gel structure temporarily loosens, enabling effortless pumping, pouring, or spreading of the formulation even at high zero-shear viscosity levels. enabling effortless pumping, pouring, or spreading even at high viscosities.

Once the shear is removed, the network rapidly rebuilds, restoring thickness and ensuring the formulation remains stable at rest. This reversible response not only improves processability and end-user convenience but also provides excellent stability.





Polymer Active(%) = 1.0% pH = 7.9

#### Advantages:

INCI:Acrylates/Steareth-20 Methacrylate Copolymer

Rapid thickening and cold-process convenience

Excellent clarity and pseudoplastic flow

Effective suspension and emulsion stabilization

Foam stabilization with salt tolerance

Shear resistance with smooth, non-tacky texture

Enhances mildness in surfactant systems

Broad pH stability and solvent compatibility

Clear, pearly appeal with seamless pumping and spreading



### **AQUAPOL® 940**

# High viscosity, crystal clarity & reliable suspension

AQUAPOL® 940 is a high-quality, crosslinked polyacrylates polymer widely used as a thickening, suspending, and stabilizing agent in personal care, pharmaceutical, and cosmetic formulations. Supplied as fluffy powder, it is easy to disperse in water to form clear, smooth, and highly viscous gels.

Upon neutralization, Carbopol 940 rapidly develops high viscosity while maintaining a non-tacky texture, providing excellent suspension stability and superior rheological control. Its short flow and non-drip properties make it ideal for clear gel, hydro alcoholic gel and cream.

#### Advantages:

**INCI Name Carbomer** 

High viscosity at low concentrations

Excellent clarity for transparent systems

Non-drip, short-flow rheology

Excellent shelf life

Emulsion stabilizer

Suspending powder

#### **Applications**

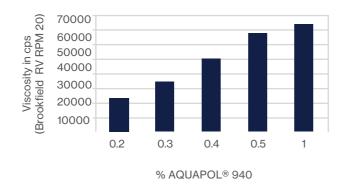
Hair styling Gel, Hydroalcoholic Gel, Massage Gel, Ultrasound Gel, After shave lotion, Aloe vera Gel, Moisturising Cream, Lotion Facial Cleanser and Body Cleanser.

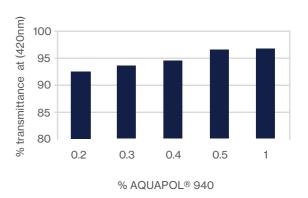
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## Concentration, viscosity & transparency: AQUAPOL® 940

AQUAPOL® 940 demonstrates concentration-dependent enhancement in both viscosity and transparency. As the concentration increases, both viscosity and clarity improve, allowing formulators to achieve the desired gel thickness while maintaining excellent optical clarity. This dual benefit makes AQUAPOL® 940 ideal for transparent gels and cosmetic formulations where high viscosity and clear appearance are essential.







	SF-1	SF - 22	940
Suspending Power	Excellent	Poor	Excellent
Rheology	Long flow	Long flow	Very Short flow
Clarity	Excellent	Excellent	Excellent
Shear Thinning	Moderate	High	Low
Shelf Life	12 months	18 months	36 months
Physical form	Liquid	Liquid	Powder

AQUAPOL® 9



# The Vikram Thermo Impact



#### Real world result

- Increased manufacturing yield
- Reduced rework and rejection
- ncreased savings on cost
- Decreased development time

- "Vikram's advance coating technology improved patient adherence which directly translated into accelerated business growth."
- CEO of a Multinational Pharma Company.

#### Impact on your business

**Regulatory confidence** by simplified documentation and compliance for approvals and exports.

**Predictable supply** ensures consistent inventory, reducing emergency sourcing and production delays.

#### Faster time-to-market

by reducing formulation iterations and shortens development cycles.

**Lower risk and fewer rejects** by minimizing batch failures.

**Improved product stability** extending shelf life and reduces degradation issues.

**Higher patient acceptance** by enhancing taste-masking and appearance to improve adherence.

#### How we deliver value

**R&D partnership** provides formulation trials and scale-up support in our labs.

**Technical service** offers on-site trials, process optimization, and tech transfer assistance.

**Product range** includes ready-to-use systems and custom polymer solutions.

**Regulatory pack** covers COAs, stability protocols, DMF support, and regulatory documentation.

Reliable manufacturing ensures EXCiPACT GMP, ISO, and HALAL certifications with consistent quality.

#### How we can help you next

- Sample & compatibility testing: We'll run tests
   & provide a detailed report.
- ROI projection: Model savings from switching coatings (yield, time, rejects).
- Regulatory support: Prepare complete documentation for export approvals.



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