

CP-39

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# Fixate<sup>™</sup> G-100 PR Polymer Liquid Hair Styling Polymer for Superior Performance

INCI Name: AMP-Acrylates/Allyl Methacrylate Copolymer

# **Quick Start Guide**

Fixate<sup>™</sup> G-100 PR polymer is a fixative polymer designed to enhance the performance properties of hair styling products. For comprehensive information on Fixate G-100 PR polymer, visit: <a href="https://www.lubrizol.com/personalcare">www.lubrizol.com/personalcare</a>.

Originally published as Fixate™ G-100 polymer, a product with identical specifications.

**Product Description:** Fixate G-100 PR polymer is a novel acrylate hair fixative polymer developed for use in hair styling products\* and other filmforming applications. Fixate G-100 PR polymer offers good efficacy, even at low use levels.

**Chemistry:** Fixate G-100 PR polymer is an anionic copolymer of (meth)acrylic acids, simple alkyl esters of (meth)acrylic acids and allyl methacrylate, pre-neutralized to pH 6.0 with aminomethyl propanol.

**Form:** Fixate G-100 PR polymer contains approximately 26% total solids. It is supplied as a low viscosity, aqueous solution which readily disperses in water or alcohol.

## **Typical Properties:**

Appearance at 25°C	Translucent Liquid
Viscosity (mPa⋅s) as supplied	<1,500
Total Solids, %	26
Clarity, 5% solids in water	>85
pH, as supplied	6.0

## **Applications:**

- · Root Lifters and Volumizers
- Spray Gels
- "Tube" and "Tub" gels
- Mousses and Styling Foams
- Styling Glazes and Lotions
- Crèmes and Waxes
- Non-chemical Smoothers/Straighteners
- Thermal or Conditioning Stylers

\*Note: Not tested for use in hair spray applications

#### **Benefits:**

- > 8 hours high humidity curl retention (90% R.H. @ 25°C)
- Excellent curl snap and curl memory
- Unique flow and leveling on hair
- Moderate wet tack for styling signal; upon drying, hair feels silky and healthy, not raspy or rough
- Excellent film strength and clarity
- Virtually no flaking or dusting, yet easily removed from hair
- Appealing product aesthetics and formulating versatility: from soft, touchable hold to a firm, crisp finish

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#### **Formulating Guidelines:**

Recommended Use Level: 1.9 - 11.5% as supplied

(0.5 - 3.0% total solids)

Recommended pH: 5.8 - 6.3

Rheology Modifiers: Carbopol® Polymers (940, 980,

ETD 2020, Ultrez 21), cellulosic thickeners

Recommended Carbopol Polymer Use Level: ~1.0%, adjust as needed for desired viscosity

Neutralization: Fixate™ G-100 PR polymer requires

no further neutralization

## Formulations Available:

E-0001	Ethnic Styling Conditioner
E-0002	Ethnic Protein Hair Gel
S-G0003	Styling Gel with Conditioner
S-G0005	Spray Conditioning Hair Gel
S-G0006	Spray Hair Gel
S-G0007	Protein Hair Gel
S-G0012	Spray Hair Gel
S-G0013	Economy Styling Gel
S-G0020	Styling Gel with Conditioner
S-G0027	Firm Control Styling Gel
S-G0030	Fiesta Hair Gel
S-G0032	Soft-Hold Styling Gel
S-G0037	Spray Hair Gel
S-X0002	Hair Stying Glaze
S-X0003	Emollient Hair Styling cream
S-X0004	Styling Foam
S-X0005	Relaxing Hair Balm & Defrizzer
S-X0007	Hair Styling Cream with Natural Oils & Conditioners
S-X0011B	Foaming Styling Lotion
S-X0014	Volumizing Hair Mousse
S-X0016	Volumizing Root Lifter
S-X0017	Scrunching Balm
S-X0020	Sheer Texturizer
S-X0029(AP)	Long Lasting Hold Spray Gel

## Microbiology:

Fixate G-100 PR polymer has been tested for Preservative Efficacy (Challenge testing). The polymer passes the standard challenge test.

## **Toxicology:**

The toxicity profile of Fixate G-100 PR polymer indicates that it has a low potential for causing irritation or sensitization in finished personal care products. These data indicate that it is suited for personal care applications where there is contact with skin or where there is a potential contact with the eyes.

## **Regulatory Status:**

See Section 15 of the SDS for chemical inventory information.

## **Storage and Handling:**

- Fixate G-100 PR polymer should be stored in closed factory-sealed containers away from direct heat and light
- Fixate G-100 PR polymer should be protected from freezing
- Fixate G-100 PR polymer is packaged in drums, 450 pounds net
- Shelf life: 24 months

#### **Literature Available:**

- Technical Data Sheet (TDS-862)
- Product Specification Sheet
- Test Procedures
- Material Safety Data Sheet
- Toxicology Studies
- Microbial Summary
- Formulation Concepts with Processing Procedures and Supplier References

#### Other Information:

- Fixate G-100 PR polymer technology is patented technology.
- The Schedule B number for Fixate G-100 PR polymer is: 3906.90.60