

GP-690 ABA SILICONE POLYOL COPOLYMER

(CAS No. 102783-01-7)

Genesee Polymers' *GP-690 ABA SILICONE POLYOL COPOLYMER* is a 100% active non-ionic silicone polyol block copolymer with the following structure:

$$\begin{array}{c|c} & CH_3 & CH_3 \\ & Si-O & Si-C_3H_6 \\ \hline & CH_3 \\ & CH_3 \\ & CH_3 \end{array}$$

GP-690 contains polyoxyethylene blocks and dimethyl silicone polymer blocks, which are joined through non-hydrolyzable silicon to carbon bonds.

GP-690 ABA SILICONE POLYOL COPOLYMER is designed to function as an emulsifier, wetting agent and profoaming additive for a variety of applications including: polyurethane foams, hard surface cleaners and polishes, and cosmetic formulations.

GP-690 contains a primary hydroxyl group at each end of the molecule, allowing for reaction with isocyanates in polyurethane resin systems. This is expected to improve flow and leveling of polyurethane coatings and impart non-stick characteristics to the cured coatings.

In textile applications, *GP-690* is suggested as a fiber lubricant where more thermal stability is needed than is provided by organic lubricants such as stearates or mineral oils.

GP-690 is soluble in lower alcohols (EtOH, IPA) and dispersible in water, along with aliphatic and aromatic hydrocarbons.

INNOVATIVE POLYMER TECHNOLOGY

Product Code: C-8361 Version: 3.0 Revision Date: November 20, 2018

TYPICAL PROPERTIES	
Appearance	Clear to Slightly Hazy, Colorless to Amber Liquid
Weight/Gallon	8.5 lbs
Viscosity 77° F	600 cSt
Flash Point (P.M.C.C.)	>250° F
Specific Gravity	1.03
% Active	100%
% Primary Hydroxyl	1.4%
% Silicone	63%
Molecular Weight	3,172 (Calculated)
Polyol Type	Polyoxyethylene (EO)
Solubility in Water	Forms Emulsion

APPLICATIONS

Pigment Dispersant

Glass Cleaner Ingredient

Thread Lubricant (Textiles)

Polyurethane Foam (Cell Control Agent)

Leveling and Flow Control Agent



SPECIAL FEATURES

Low Surface Tension

Contains Primary Hydroxyl Groups

Non-Hydrolyzable

PROCESSING AND SAFETY GUIDELINES

GP-690 ABA SILICONE POLYOL COPOLYMER has a very low order of toxicity, but should still be handled with all precautions common to the use of any industrial chemical product. *GP-690* becomes hazy when stored below 77° F. Heating above this temperature restores clarity.

For additional information refer to Safety Data Sheet.

PACKAGING/HANDLING/STORAGE

GP-690 ABA SILICONE POLYOL COPOLYMER is supplied in 5-gallon (40 lbs.) pails, 55-gallon (465 lbs.) drums and 330-gallon (2790 lbs.) totes.

Moisture Sensitive. Keep containers tightly sealed. Store below 100° F.



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