

Poly-G[®] 55-112

Poly-G[®] * 55-112 polyol is an ethylene oxide-capped diol that produces urethanes with physical properties superior to those achieved with a conventional polyol of equivalent molecular weight. When properly formulated, in fact, *Poly-G* 55-112 polyol produces urethane with properties approaching those of elastomers produced with polyesters and polytetramethylene glycol. (See Data Sheet, "55Series Diols in High-Performance Elastomers".)

One of Monument Chemical's line of VHP (Very High Primary)polyether polyols, *Poly-G* 55-112 polyol has a nominal molecular weight of 1,000. The ethylene oxide cap yields a primary hydroxyl content of approximately 75%, which enhances reactivity. Ideally suited for fast-curing systems, such as thermoplastic urethanes (TPU), reaction injection molded (RIM) and cast elastomers, and coatings. It is a stable, practically colorless liquid that is neither volatile nor corrosive, with a low pour point and high flash point.¹

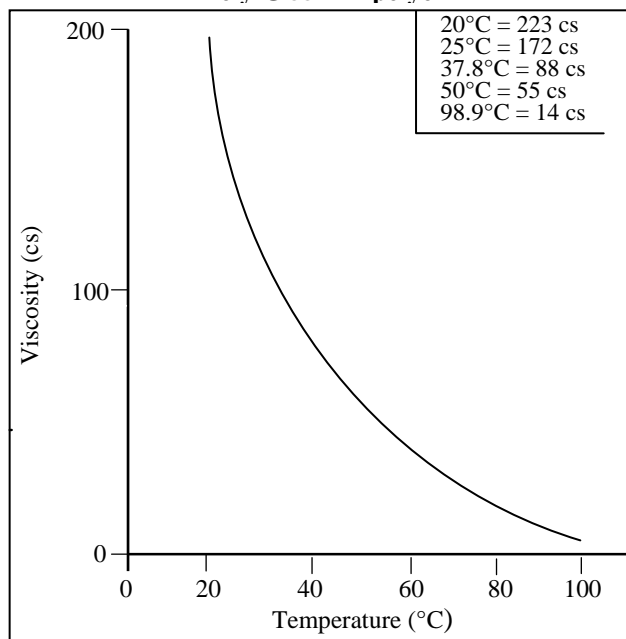
Typical physical properties are presented in Table 1. The effects of temperature on the viscosity and specific gravity are shown in Figures 1 and 2, respectively.

**Table 1
Typical Physical Properties**

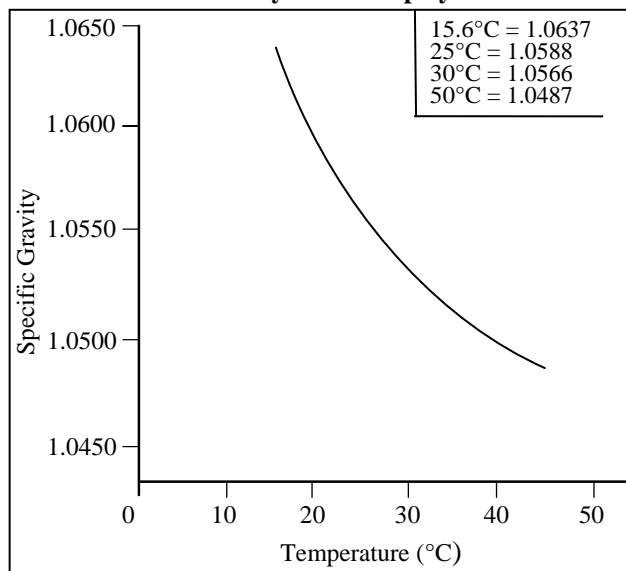
Hydroxyl No. (mgKOH/g)	112
Water (% by weight), max	0.02
Acid No. (mgKOH/g), max	0.05
Color (APHA)	25
pH in 10/6 Isopropanol/Water	6.5
Viscosity @ 25°C (cs)	175
Specific Gravity @ 25°C/25°C	1.056
Flash Point ¹ , COC	
(°C)	247
(°F)	477
Density @ 25°C (lb/gal)	8.79

¹The flammability properties of this material, or any other material, are not intended to reflect the fire hazards presented by any resultant cellular or foamed plastic product.

**Figure 1
Viscosity vs. Temperature
Poly-G 55-112 polyol**



**Figure 2
Specific Gravity vs. Temperature
Poly-G 55-112 polyol**



Storage and Handling

At temperatures below room temperature, *Poly-G 55-112* polyol may thicken or gel. Its normal liquid condition may be restored by heating to 38°C and thoroughly mixing or drum rolling.

Poly-G 55-112 polyol is hygroscopic. While water content at the time of shipment is extremely low, the product can absorb atmospheric moisture in amounts up to several percent of its weight

Thus, storage should be in drums or bulk tanks under a blanket of dry nitrogen or -40° dew point dry air. Calcium chloride or silica gel drying systems should be installed on all vents to prevent atmospheric moisture from entering the tank. See Monument Chemical Data Sheet "Storage and Handling of *Poly- G* Polyols" for recommendations of construction materials and heating systems

For More Information

Technical Service

Technical service is available to facilitate further use of Monument Chemical products. If you have a specific question or need further information, please write or call Monument Chemical, Customer Service, 2450 Olin Road, Brandenburg, KY 40108; (800) 636-3786, or fax: (270) 422-6456.

Or visit our web site at: www.monumentchemical.com

How To Order

To place orders for delivery in the U.S. or Canada and to get fast answers on order status or product availabilities, call our toll-free number: (800) 636-3786.

For written inquiries about orders, and to place confirmations, send to Monument Chemical, Customer Service, 2450 Olin Road, Brandenburg, KY 40108.

Please refer to the Material Safety Data Sheet (MSDS) for complete information on Storage and Handling, Toxicological Properties, Personal Protection, First Aid, Spill and Leak Procedures, and Waste Disposal. To order an MSDS, call Monument Chemical at (800) 636-3786. Before using or handling this product, the MSDS should be thoroughly reviewed.

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