

## *Poly-Q*<sup>®</sup> 40-56 Polyether Polyol

*Poly-Q*<sup>®</sup> \* 40-56 polyether polyol is an ethylene diamine initiated, four-functional polyether polyol. The four hydroxyl groups provide highly reactive sites for polyurethane reactions. The two tertiary amines contribute autocatalytic activity for the polyurethane reaction. With an average molecular weight of 4000, *Poly-Q* 40-56 polyether polyol is a reactive crosslinking agent in many polyurethane applications including coatings, sealants, adhesives, elastomers and rigid foams.

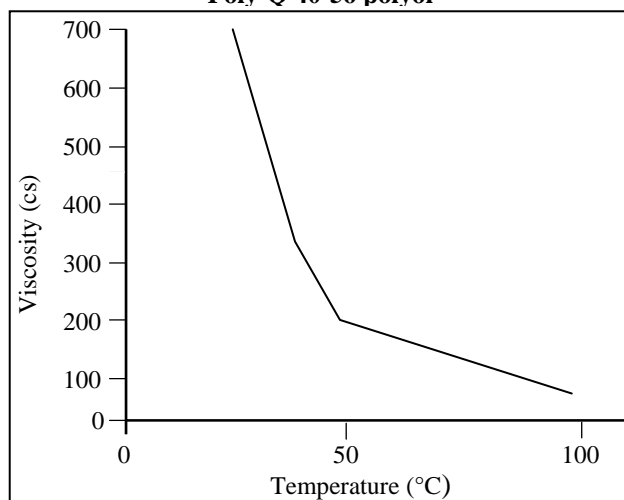
*Poly-Q* 40-56 polyether polyol is a stable liquid with a high flash point.<sup>1</sup>

Typical physical properties of *Poly-Q* 40-56 polyether polyol are presented in Table 1. The effects of temperature on viscosity and specific gravity are shown in Figures 1 and 2, respectively.

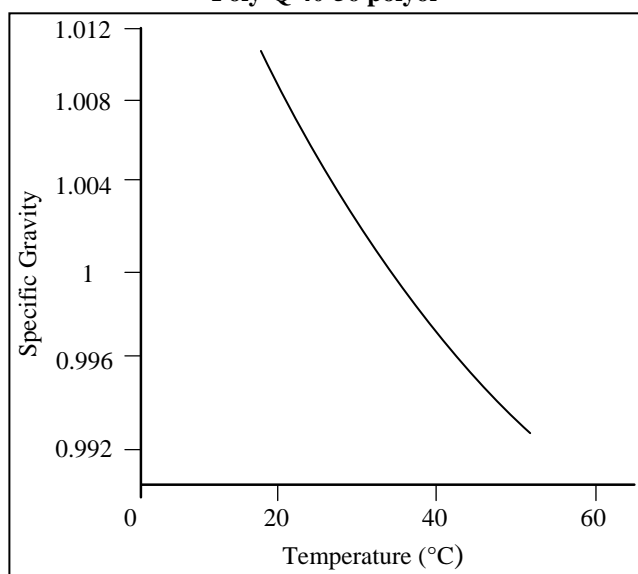
**Table 1**  
**Typical Physical Properties**

Hydroxyl No. (mgKOH/g)	56
Water (% by weight), max	0.05
Color (APHA), max	100
pH in 10/6 Isopropanol/Water	10
Viscosity @ 25°C (cs)	650
Flash Point <sup>1</sup> , COC	
(°C)	204
(°F)	400
Specific Gravity @ 25°C/25°C	1.004
Density @ 25°C (lb/gal)	8.4

**Figure 1**  
**Viscosity vs. Temperature**  
**Poly-Q 40-56 polyol**



**Figure 2**  
**Specific Gravity vs. Temperature**  
**Poly-Q 40-56 polyol**



<sup>1</sup>The 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.

### Storage and Handling

*Poly-Q* 40-56 polyether polyol does not present any unusual problems for ordinary handling and storage. It is a highly viscous liquid and is best stored and handled at 24-49°C (75-120°F). If stored below room temperature or if too viscous to pump, it should be thoroughly mixed and heated to 38-49°C (100-120°F).

*Poly-Q* 40-56 polyether polyol is hygroscopic. While water content at the time of shipment is very low, this product can absorb atmospheric moisture in amounts up to several weight percent. To ensure high product quality, storage should be in drums or bulk tanks under a blanket of dry nitrogen or -40°F dew point air. Calcium chloride or silica gel drying systems should be installed on all vents to prevent atmospheric moisture from entering the tank. See Arch Data Sheet, *Storage and Handling of Poly-G Polyols*, for recommendations for materials of construction 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](http://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.

*This bulletin and the information contained herein are offered solely for your consideration, investigation and verification. **NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OTHERWISE, ARE MADE OR CONTAINED HEREIN.** Monument Chemical's exclusive responsibility for any claims, including claims based on negligence, arising in connection with the information contained herein or the subsequent purchase, use, storage or handling of the product will in no event exceed Monument Chemical's sales price for the product with respect to which damages are claimed. **IN NO EVENT WILL MONUMENT CHEMICAL BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.** User accepts full responsibility for compliance with all applicable Federal, state and local laws and regulations. Nothing contained herein will be construed to constitute permission or a recommendation to use the product in any process or formulation covered by a patent or a patent application owned by Monument Chemical or by others. No statements or representations which differ from the above shall be binding upon Monument Chemical unless contained in a duly executed written agreement.*