



## *Poly-G*<sup>®</sup> 21-77, 21-90, 21-112, 21-187 Polyols

*Poly-G* 21-77, 21-90, 21-112, and 21-187 polyether glycols are white waxy solids at ambient temperatures with exception of *Poly-G* 21-187. The 21 series polyols are typically used in hydrophilic polyurethane applications. Typical physical properties of these products are shown in Table 1.

**Table 1**  
**Typical Physical Properties of *Poly-G* 21-77, 21-90, 21-112, and 21-187 polyether glycols**

Table 1 – Typical Physical Properties				
<i>Poly-G</i>	21-77	21-90	21-112	21-187
Hydroxyl No., mg KOH/g	77	90	112	187
Color, APHA maximum 25% aqueous, except 21-187	30	30	30	25
pH in 10/6 in IPA/H <sub>2</sub> O	6	6	6	6
Water Content, wt%	0.05	0.05	0.05	0.03
Acid No., mg KOH/g	0.05	0.05	0.05	0.05
Na & K, ppm maximum	5	5	5	5
Viscosity @ 210 F, cst	27	23	18	10

### Storage and Handling

*Poly-G* 21-77, 21-90, 21-112, and 21-187 polyols with the exception of 21-187 are solids at ambient temperature. Thus, storage tanks should be equipped with heating coils to maintain these products in a fluid state. Temperature should not exceed 49 degrees Celsius (120 degrees Fahrenheit). Consideration must be given to some of its properties when high product purity must be maintained.

*Poly-G* 21-77, 21-90, 21-112, and 21-187 polyols are hygroscopic. While water content at the time of shipment is low, the product can absorb atmospheric moisture in amounts up to several percent of its weight.

Storage should be under a blanket of dry nitrogen or –40 degree dew point dry air under conditions below 130 F. 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 of construction materials and heating systems.