

CARPOL® GSP-280

Polyether Polyol

CARPOL[®] **GSP-280** is a glycerin/sucrose-initiated polyether polyol. The high functionality of the initiators yields a resultant polyol with a functionality of <u>seven</u> and a typical hydroxyl value of <u>280</u>. Due to this polyol's functionality, its niche is rigid foam and its applications. Blending this polyol with other polyether polyols allows for foam systems with high to low degrees of crosslinking. In addition, CARPOL[®] GSP-280 is mildly catalytic, which enables the use of less catalyst while still providing the formulator with control over the system's reactivity.

Typical End Use Applications

- Insulation
- Portable Coolers

- Pour-in-Place Insulation
- Rail Boxcars

Typical Analytical Properties*		
Hydroxyl Number (mg KOH / g)	280	
pH (10 parts of IPA: 6 parts of H ₂ O)	7.0	
Moisture (%) [maximum]	0.08	
Color (Gardner) [maximum]	7	
[maximam]		
Appearance	Free &	
, appoulation	Clear	
Viscosity @ 25 °C (cP)	2,600	
	2,555	
Density @ 25 °C (lb / gal)	9.22	
Potassium (ppm) [maximum]	10	

Viscosity Profile 20000 Viscosity (cP) 2000 200 20 30 10 50 60 Temperature (°C) **Viscosity Information** 77 °F 140 °F 120 °F 2,600 cP 240 cP 200 cP

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^{*}Please note that these values are not specifications

CARPOL® GSP-280 Foam Formulation		
B-Side Components	<u>Parts</u>	
CARPOL® GSP-280	83.10	
Tegostab [®] 8408	1.50	
DABCO [®] R-8020	1.00	
Water	2.40	
Enovate [®] 245 FA	12.00	
Mix Ratio		
89.4 parts Polymeric MDI : 100 parts B-Side		

Reactivity Profile @ 70 °C (seconds)		
Cream	13	
Gel	89	
Free Rise	131	
Tack Free		
Physical Properties		
Free Rise Density (lb / in ³)	1.75	
Compression Strength, parallel (psi)	20	
Compression Strength, perpendicular (psi)	21	
Humid Age, 28 days, 90% Rel. Humidity, 158 °F (% Change)	-0.22	
Low Temperature Age, 28 days, -20 °F (% Change)	-0.22	
Oven Age, 28 days, 200 °F (% Change)	-0.31	

Storage Information

CARPOL® GSP-280 will absorb water if the product container is not secured properly. This may affect reactivity, appearance, and performance. Therefore, it is advised that all receptacles containing this material be tightly fastened and stored in a dry place.

Consult the Safety Data Sheet for additional information.

Health and Safety Information

Health and safety information is available in the form of a Safety Data Sheet. This literature, describing proper precautions and personal protective gear, is available for review. To receive this information please contact a Carpenter Co. representative.

Ordering and Shipping Options

Sample Sizes	Products Packaged/Shipped
1 quart	Drum 460 lb net wt.
1 gallon	Totebin 2,300 lb net wt.
5 gallon	Tankwagon 40,000-45,000 lb net wt.
	Railcar 185,000-189,000 lb net wt.

For additional information please contact:

Carpenter Co.
Chemicals Division

Customer Service 800-260-5373

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Important: The information contained in this product data sheet is offered for your consideration, investigation, and verification. The data is presented in good faith and is believed to be reliable. Carpenter, however, makes no representation as to the completeness or accuracy. Carpenter makes no warranty, express or implied, with respect to the data contained herein. Carpenter cannot anticipate all conditions under which this data and the product may be used. The conditions of handling, storage, use, and disposal of the product are beyond Carpenter's control. Thus we expressly disclaim responsibility or liability for any loss, damage, or expense arising out of reliance on the information contained herein. You are advised to make your own determination as to safety, suitability, and appropriate manner of handling, storage, use, and disposal. For further information please consult the appropriate Carpenter Safety Data Sheet. Warning: These products can be used to prepare a variety of polyurethane products. Polyurethanes are organic materials and must be considered combustible.