

CARPOL[®] GSP-520

Polyether Polyol

CARPOL[®] GSP-520 is a glycerin/sucrose-initiated polyether polyol. The high functionality of the initiators yields a resultant polyol with a nominal functionality of five and a typical hydroxyl number of 520. Due to this polyol's high functionality, it is typically used in rigid foam and its applications. Blending CARPOL[®] GSP-520 with other polyether polyols allows for foam systems with high to lower degrees of crosslinking.

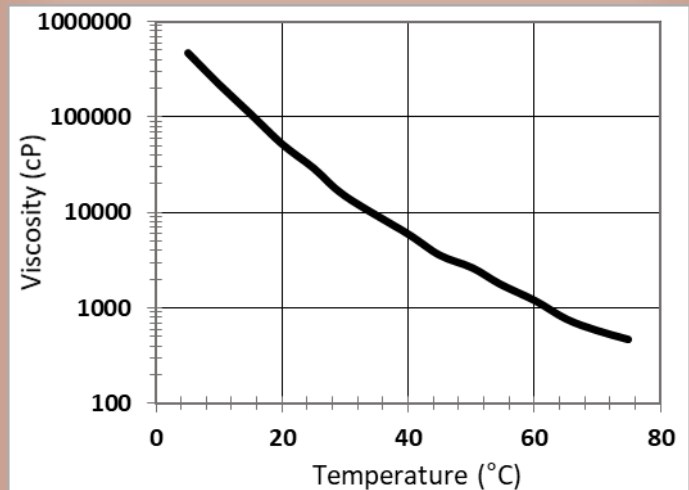
Typical End Use Applications

- Insulation
- Molded Rigid Foam
- Rigid Boardstock Foam
- Rigid Spray Coatings

Typical Analytical Properties*

| | |
|---|--------------|
| Hydroxyl Number (mg KOH / g) | 520 |
| pH (10 parts of IPA: 6 parts of H ₂ O) | 10.0 |
| Moisture (%) [maximum] | 0.10 |
| Color (Gardner) [maximum] | 12 |
| Appearance | Free & Clear |
| Viscosity @ 25 °C (cP) | 34,000 |
| Density @ 25 °C (lb / gal) | 9.08 |
| Total Amine Value (mg KOH / g) | 2.0 |
| Potassium (ppm) [maximum] | 10.0 |

Viscosity Profile



Viscosity Information

| | | |
|-----------|---------|--------|
| 77 °F | 140 °F | 160 °F |
| 34,000 cP | 1190 cP | 580 cP |

*Please note that these values are not specifications

CARPOL[®] GSP-520 Foam Formulation

| <u>B-Side Components</u> | <u>Parts</u> |
|-----------------------------|--------------|
| CARPOL [®] GSP-520 | 56.30 |
| CARPOL [®] GP-700 | 24.10 |
| TEGOSTAB [®] 8408 | 2.00 |
| DABCO [®] 33 LV | 0.75 |
| Niax [*] A-1 | 0.38 |
| Water | 1.50 |
| Enovate [®] 245 FA | 15.00 |

Mix Ratio

208 parts of Polymeric MDI : 200 parts of B-Side

Reactivity Profile @ 70 °C (seconds)

| | |
|-----------|-----|
| Cream | 11 |
| Gel | 102 |
| Free Rise | 155 |
| Tack Free | 172 |

Physical Properties

| | |
|--|------|
| Free Rise Density (lb / in ³) | 2.0 |
| Compression Strength, parallel (psi) | 26 |
| Compression Strength, perpendicular (psi) | 18 |
| Humid Age, 28 days, 90% Rel. Humidity, 158 °F (% change) | 2.8 |
| Low Temperature Age, 28 days, -20 °F (% change) | -0.5 |
| Oven Age, 28 days, 200 °F (% change) | 0.8 |

Storage Information

CARPOL[®] GSP-520 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

1 quart
1 gallon
5 gallon

Products Packaged/Shipped

Drum 460 lb net wt.
Totebin 2,300 lb net wt.
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
5016 Monument Avenue
Richmond VA 23230

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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.