



# Geon™ Vinyl Flexible B85UB

## Flexible Polyvinyl Chloride

### Key Characteristics

| General               |  |                             |                     |
|-----------------------|--|-----------------------------|---------------------|
| Material Status       | • Commercial: Active                     |                             |                     |
| Regional Availability | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America     |
| Additive              | • Biocide<br>• UV Stabilizer             |                             |                     |
| Features              | • Medium Gloss<br>• UV Absorbing         |                             |                     |
| Uses                  | • Liners                                 |                             |                     |
| Forms                 | • Pellets                                |                             |                     |
| Processing Method     | • Coextrusion                            | • Extrusion                 | • Injection Molding |

### Technical Properties <sup>1</sup>

| Physical                                    | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Specific Gravity                            | 1.33                    | 1.33               | ASTM D792   |
| Mechanical                                  | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength <sup>2</sup> (100% Strain) | 1500 psi                | 10.3 MPa           | ASTM D638   |
| Tensile Strength <sup>2</sup> (Break)       | 2460 psi                | 17.0 MPa           | ASTM D638   |
| Tensile Elongation <sup>2</sup> (Break)     | 360 %                   | 360 %              | ASTM D638   |
| Tear Resistance <sup>3</sup>                | 460 lbf/in              | 79.7 kN/m          | ASTM D1004  |
| Elastomers                                  | Typical Value (English) | Typical Value (SI) | Test Method |
| Compression Set (73°F (23°C), 22 hr)        | 35 %                    | 35 %               | ASTM D395   |
| Clash-Berg Modulus                          |                         |                    | ASTM D1043  |
| --  | 77700 psi               | 536 MPa            |             |
| -17°F (-27°C)                               | 45000 psi               | 310 MPa            |             |
| Hardness                                    | Typical Value (English) | Typical Value (SI) | Test Method |
| Durometer Hardness                          |                         |                    | ASTM D2240  |
| Shore A                                     | 90                      | 90                 |             |
| Shore A, 15 sec                             | 83                      | 83                 |             |
| Thermal                                     | Typical Value (English) | Typical Value (SI) | Test Method |
| Brittleness Temperature                     | -20.2 °F                | -29.0 °C           | ASTM D746   |

### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Processing (Melt) Temp | 380 to 390 °F           | 193 to 199 °C      |
| Extrusion              | Typical Value (English) | Typical Value (SI) |
| Melt Temperature       | 340 to 350 °F           | 171 to 177 °C      |

### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> 20 in/min (510 mm/min)

<sup>3</sup> Die C, 2 in/min

Copyright © 2015 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

**CONTACT INFORMATION**

**Americas**

United States - Avon Lake  
+1 440 930 1000

United States - McHenry  
+1 815 385 8500

**Asia**

China - Guangzhou  
+86 20 8732 7260

China - Shenzhen  
+86 755 2969 2888

China - Suzhou  
+86 512 6823 24 38

China - Suzhou  
+86 512 6265 2600

Hong Kong -  
+852 2690 5332

Taiwan - Yonghe City,  
+886 9396 99740, +886 2929 1849

**Europe**

Germany - Gaggenau  
+49 7225 6802 0

Spain - Barbastro (Huesca)  
+34 974 310 314



*Beyond Polymers.*

*Better Business Solutions.™*

[www.polyone.com](http://www.polyone.com)

**PolyOne Americas**

33587 Walker Road  
Avon Lake, Ohio 44012  
United States  
+1 440 930 1000  
+1 866 POLYONE

**PolyOne Asia**

No. 88 Guoshoujing Road  
Z.J Hi-tech Park, Pudong  
Shanghai, 201203, China  
+86 21 5080 1188

**PolyOne Europe**

6 Giällewee  
+352 269 050 35

Copyright ©, 2015 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. POLYONE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.