

Product Data Sheet & General Processing Conditions

Permaprene® 2800 B-85A Thermoplastic Vulcanizate (TPV)

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|---|-----------------------|----------------|--------------|
| Charles Cravity | 1.02 | 1.02 | D 792 |
| Specific Gravity | 1.02 | 1.02 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0130 - 0.0190 in/in | 1.30 - 1.90 % | D 955 |
| 1/8 1 (3.2 1 11) Section | 0.0130 - 0.0190 | 1.30 - 1.90 /6 | D 900 |
| MECHANICAL | | | |
| Tensile Strength | | | |
| Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min) | 1500 psi | 10 MPa | D 412 |
| Tensile Elongation | | | |
| Break, Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min) | 750.0 % | 750.0 % | D 412 |
| Tensile Stress | | | |
| Die C 0.125 in, 20 in/min (3.2 mm, 500 mm/min) | | | |
| @ 100 % | 880.0 psi | 6.1 MPa | D 412 |
| Tear Strength, Die C | 280.0 pli | 49.1 N/mm | D 624 |
| Compression Set | | | |
| 22 h @ 23 °C (73 °F), Method B, Type 2 | 35 % | 35 % | D 395 |
| 22 h @ 70 °C (158 °F), Method B, Type 2 | 56 % | 56 % | D 395 |
| Hardness | | | |
| Shore A, 10 s delay | 85 | 85 | D 2240 |
| THERMAL | | | |
| Ignition Resistance* | UD 0 4440 : | 115.0.4.5 | D |
| Flammability** | HB @ 1/16 in | HB @ 1.5 mm | D 635 |

PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

GENERAL PROCESSING FOR INJECTION MOLDING

| | English | SI Metric |
|------------------|--------------------|-------------------|
| Melt Temperature | 380 - 440 °F | 193 - 227 °C |
| Mold Temperature | 70 - 175 °F | 21 - 79 °C |
| Drying | 2 - 3 hrs @ 175 °F | 2 - 3 hrs @ 79 °C |
| Moisture Content | < 0.05 % | < 0.05 % |
| Dew Point | 0 °F | -18 °C |
| | | |
| PROCESSING NOTES | | |

21 Feb 2017 SAC

This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

^{*} This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

^{**} Values per RTP Company testing.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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