

# DIVERSIFIED SILICONE PRODUCTS, INC.

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## Silicone Foam & Sponge Extreme Performance Cellular Elastomers

| Description:                                       |   | DSP0018                                    | DSP1248  | DSP1135S                                       | DSP1135M   | DSP1135F                                       | DSP1135XF  | DSP1135LCSM  | DSP1175MFR  | DSP1165-1145   |
|--|---|--|--|--|--|--|--|--|---|--|
|  |   | Soft Density<br>Open Cell Silicone<br>Foam | Medium Density<br>Closed Cell<br>Silicone Foam | Soft Density<br>Closed Cell<br>Silicone Sponge | Medium Density<br>Closed Cell<br>Silicone Sponge | Firm Density<br>Closed Cell<br>Silicone Sponge | Extra-Firm Density<br>Closed Cell<br>Silicone Sponge | Low Compression<br>Set Medium<br>Density Closed<br>Cell Silicone<br>Sponge | Flame Retardant<br>Medium Density<br>Closed Cell<br>Silicone Sponge | Fiberglass<br>Reinforced Closed<br>Cell Silicone<br>Sponge |
| <b>Basic Physical<br/>Properties</b>               | Cell Structure  | Open                                       | Closed   | Closed   | Closed   | Closed   | Closed   | Closed   | Closed  | Closed   |
|  | Surface Skin  | Smooth                                     | Smooth   | Fine Fabric                                    | Fine Fabric                                      | Fine Fabric                                    | Fine Fabric  | Fine Fabric  | Fine Fabric   | Fine Fabric  |
|  | Density lbs/ft3                                       | 12   | 20   | 31   | 33   | 40   | 45   | 33   | 33  | 33   |
|  | Compression Deflection                                | 2-5  | 6-14   | 5-9  | 6-14   | 12-20  | 16-26  | 6-14   | 6-14  | 6-14   |
| <b>Thermal,<br/>Electrical and<br/>Environment</b> | Compression Set                                       | 5%   | 5%   | 25%  | 25%  | 25%  | 25%  | 10%  | 25%   | 25%  |
|  | Tensile Strength                                      | Fair                                       | Fair   | Good   | Good   | Very Good                                      | Excellent  | Excellent  | Excellent   | Excellent  |
|  | Elongation  | Fair                                       | Fair   | Good   | Good   | Very Good                                      | Excellent  | Excellent  | Excellent   | Poor   |
|  | Water Absorption                                      | <4%  | <2%  | <1%  | <1%  | <1%  | <1%  | <1%  | <1%   | <1%  |
| <b>Flame and<br/>Outgassing</b>                    | Thermal Conductivity BTU<br>in/hr/ft <sup>2</sup> /°F | 0.39                                       | 0.63   | 0.75   | 0.75   | 0.8  | 0.85   | 0.85   | 0.85  | 0.85   |
|  | Temperature Range F                                   | -67 to +392                                | -67 to +392                                    | -103 to +450                                   | -103 to +450                                     | -103 to +450                                   | -103 to +450   | -103 to +450   | -103 to +450  | -103 to +450   |
|  | UV / Ozone Resistance                                 | Excellent                                  | Excellent                                      | Excellent                                      | Excellent  | Excellent                                      | Excellent  | Excellent  | Excellent   | Excellent  |
|  | Dielectric Strength (approx)                          | 90 volts/mil                               | 90 volts/mil                                   | 150 volts/mil                                  | 150 volts/mil                                    | 150 volts/mil                                  | 150 volts/mil  | 150 volts/mil  | 150 volts/mil   | 150 volts/mil  |
| <b>Colors and<br/>Dimensions</b>                   | Flame Resistance                                      | *UL94 V1,V0                                | *UL94 V1,V0                                    | -  | -  | -  | -  | -  | **UL94 HB   | -  |
|  | Vertical Flame FAR 25.853                             | Pass                                       | Pass   | -  | -  | -  | -  | -  | Pass  | -  |
|  | Toxic Gas Emission Bombardier<br>SMP 800C             | Pass                                       | Pass   | -  | -  | -  | -  | -  | -   | -  |
|  | Colors (Most Common Listed,<br>Many Others Available) | White, Grey                                | Grey   | Red, Grey, Black,<br>White                     | Red, Grey, Black,<br>White                       | Red, Grey, Black,<br>White                     | Red, Grey, Black,<br>White                           | Red, Brown   | Dark Blue   | Grey   |
| <b>Specifications</b>                              | Thickness Range ****                                  | 1/16" - 1"                                 | 1/8" - 3/8"                                    | 1/32" - 2"                                     | 1/32" - 2"                                       | 1/32" - 2"                                     | 1/32" - 2"   | 1/32" - 2"   | 1/32" - 2"  | 1/32" - 2"   |
|  | Continuous Rolls                                      | Yes  | Yes  | Yes  | Yes  | Yes  | Yes  | Yes  | Yes   | Yes  |
|  | Standard Width  | 36"  | 36"  | 36"  | 36"  | 36"  | 36"  | 36"  | 36"   | 36"  |
|  | Available Widths                                      | 1/4"-54"                                   | 1/4"-54"                                       | 1/4"-54"                                       | 1/4"-54"   | 1/4"-54"                                       | 1/4"-54"   | 1/4"-54"   | 1/4"-54"  | 1/4"-54"   |
| <b>Specifications</b>                              | Specifications<br>(Most Common Listed, Many Avail.)   | BMS 1-68                                   | AMS3195  | ASTM D1056                                     | AMS3195<br>MIL-R-46089                           | AMS3196<br>MIL-R-46089                         | ASTM D1056   |  | **UL94 HB<br>***DMS1980   |  |
|  | FDA Approved 21CFR177.2600                            | Yes (White Only)                           | Yes (Grey Only)                                | NO   | NO   | NO   | NO   | NO   | NO  | NO   |

\* Limited to specific thickness & colors    \*\*Capable of meeting but not listed with Underwriters Laboratories    \*\*\*Capable of Meeting    \*\*\*\*Over 1/2" material is laminated to achieve thickness

Tests results listed above are representations and descriptions to the best of our knowledge. The above values are typical properties and are provided for information purposes only. They should not be used to set specification requirements. It is up to the end user to determine whether the material or materials are suitable for the intended application.