Corning® Gorilla® Glass Victus® 2

Corning continues to push the boundaries of glass by advancing the durability of our toughest Gorilla Glass yet. Gorilla Glass Victus 2 delivers improved drop performance on rough surfaces like concrete, while maintaining the advantaged scratch performance of Corning® Gorilla® Glass Victus®.

Product Information

Benefits
- Improved drop performance, up to 1m on 80-grit and up to 2m on 180-grit
- High resistance to scratch and sharp contact damage
- High retained strength after use
- Superior surface quality, with the same advantaged scratch resistance as Corning® Gorilla® Glass Victus®

Applications
Ideal protective cover material for the front and back of all electronic devices:
- Smartphones
- Notebook PCs
- Tablets
- Smartwatches and wearables
- Smart Home devices
- Cameras
- Commercial and Point of Sale Displays

Thickness
Standard 0.4 mm – 1.2 mm
Other Available upon request

Viscosity
Softening Point (10^7.6 poises) 878 °C
Annealing Point (10^11.2 poises) 631 °C
Strain Point (10^9.7 poises) 579 °C

Properties
Density 2.41 g/cm^3
Young’s Modulus 79 GPa
Poisson’s Ratio 0.22
Shear Modulus 32.2 GPa
Vickers Hardness (200g load) 595 kgf/mm^2
Unstrengthened
Strengthened 670 kgf/mm^2
Fracture Toughness 0.82 MPa m^0.5
Coefficient of Thermal Expansion (0-300°C) 58.8 x 10^-7/°C

Chemical Durability
Durability is measured via weight loss per surface area after immersion in the solvents shown below. Values are highly dependent upon actual testing conditions. Data is reported for Gorilla Glass Victus 2.

<table>
<thead>
<tr>
<th>Reagent</th>
<th>Time</th>
<th>Temperature °C</th>
<th>Weight Loss (mg/cm^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCl – 5 wt%</td>
<td>24 hrs.</td>
<td>95</td>
<td>3.6</td>
</tr>
<tr>
<td>NH4F:HF – 10 wt%</td>
<td>20 min.</td>
<td>20</td>
<td>1.3</td>
</tr>
<tr>
<td>HF – 10 wt%</td>
<td>20 min.</td>
<td>20</td>
<td>14.6</td>
</tr>
<tr>
<td>NaOH – 5 wt%</td>
<td>6 hrs.</td>
<td>95</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Electrical

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Dielectric Constant</th>
<th>Loss Tangent</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>6.45</td>
<td>0.008</td>
</tr>
<tr>
<td>163</td>
<td>6.41</td>
<td>0.008</td>
</tr>
<tr>
<td>272</td>
<td>6.40</td>
<td>0.009</td>
</tr>
<tr>
<td>381</td>
<td>6.38</td>
<td>0.009</td>
</tr>
<tr>
<td>490</td>
<td>6.38</td>
<td>0.008</td>
</tr>
<tr>
<td>599</td>
<td>6.37</td>
<td>0.009</td>
</tr>
<tr>
<td>912</td>
<td>6.39</td>
<td>0.010</td>
</tr>
<tr>
<td>1499</td>
<td>6.37</td>
<td>0.010</td>
</tr>
<tr>
<td>1977</td>
<td>6.36</td>
<td>0.011</td>
</tr>
<tr>
<td>2466</td>
<td>6.34</td>
<td>0.011</td>
</tr>
<tr>
<td>2986</td>
<td>6.33</td>
<td>0.012</td>
</tr>
</tbody>
</table>

Chemical Strengthening
Please contact a Corning Account Manager for chemical strengthening capability based on thickness and application.
In lab tests, Gorilla Glass Victus 2 survived drops from up to 1 meter on 80-grit sandpaper, simulating rough surfaces.

Competitive aluminosilicate typically fails from less than 0.5 meters.

In additional lab testing, Gorilla Glass Victus 2 survived drops from up to 2 meters on 180-grit sandpaper.

Gorilla Glass Victus 2 has up to 4x higher scratch threshold than competitive Al-Si glasses.

We tested for scratch threshold using our Knoop Diamond Scratch Test. For Gorilla Glass Victus 2, the scratch threshold is typically 8-10 Newtons. The typical threshold for competitive aluminosilicate is at 2-4 Newtons.

Corning® Gorilla® Glass Victus® 2
Always Tough. Always Innovating.

Contact us
gorillaglass@corning.com

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