Urethane Bumpers
Super Low Hardness / Extra-Low Hardness

Features of Extra Low Hardness Urethane
- High physical strength that cannot be obtained from conventional soft materials.
- MSUMI original material that suppresses self-adhesion, which is the problem of soft material.
- This material has high resistance against impact, and little permanent compression.
- It has the same properties as other polyurethane.

Comparison of Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Extra Low Hardness Urethane</th>
<th>Nitrile Ethylene</th>
<th>Silicon</th>
<th>Fluorine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness</td>
<td>Excellent</td>
<td>Good</td>
<td>Good</td>
<td>Excellent</td>
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<tr>
<td>Compression Test</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Good</td>
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<tr>
<td>Elasticity / Resilience</td>
<td>Excellent</td>
<td>Good</td>
<td>Good</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Variation of Impact Acceleration Comparison Test

Shock Absorbing Gel

Urethane Shore A50

Precaution for Use
- Do not stick or cut with sharpened objects.
- Do not bear or pull. - Insert it only from the vertical direction. - Keep away from fire.
- Do not use detergents for cleaning. - Replace it when broken.

Elasticity of Shock Absorbing Gel

Shock Absorbing Gel
Urethane Shore A50

40% Compressive Load Test Results

Test Conditions
- Measuring method: Measured with accelerometer recorded on the bumper dropped on the test materials.
- Size of test material: 100 x 100 x 20 mm
- Measuring instrument: Hammer: Drop height 150 mm
- Length from fulcrum to impact point: 200 mm

Equipment:
- Accelerometer: (Type: SR-10, APM-100)
- Data logger: Keyence NA-215, NA-405
- PC: 16 bit analog (Data Scale: 0–2500)
- Measurement conditions: Temperature 23°C, Humidity 50%
- Convergence time is defined as the time until acceleration falls below 10 m/s².

There's more on the web: misumiusa.com
Check out misumiusa.com for the most current pricing and lead time.