## Turcite® B Slydway® Technical Data

### Turcite B

#### Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Units</th>
<th>Test Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>PSI</td>
<td>ASTM D4894</td>
<td>2000 min</td>
</tr>
<tr>
<td>Tensile Elongation</td>
<td>%</td>
<td>ASTM D4894</td>
<td>170 min</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>-</td>
<td>ASTM D792</td>
<td>3.10</td>
</tr>
<tr>
<td>Hardness</td>
<td>Shore D</td>
<td>ASTM D2240</td>
<td>50-60</td>
</tr>
</tbody>
</table>
Turcite® B Slydway® Technical Data

Coefficient of Friction

- Testing data from testing completed at Corporate R&D
**Turcite® B Slydway® Technical Data**

**Coefficient of Friction**

- Testing data from testing completed at Corporate R&D
**Coefficient of Friction**

In the application, Slydway displays only a slight difference between static and dynamic friction, thus eliminating any presence of stick slip.

Figure shows the range of static friction when using different oils. The values were determined on a scraped Turcite®-B sliding surface with a surface contact pressure of 3.5 N/cm² and a surface roughness of the guide of Rₐ = 0.6 μm.

Figure shows the least differences at the transition to the hydrodynamic range. With higher surface pressures of up to 200 N/m², the sliding behaviour changes only insignificantly. Good lubrication is of paramount importance in order to achieve a controlled level of dynamic friction.
Turcite® B Slydway® Technical Data

Wear

- Testing data from testing completed at Corporate R&D
- Turcite B Slydway should always be well lubricated during the start-up phase. Very fine particles of the Turcite B Slydway are transferred to the mating surface during the start-up phase.
  - This leads to the slight shading of the metallic mating surface.
  - The start-up phase is concluded with the smoothing phase.
- After the smoothing phase, Turcite B Slydway will experience a low level of both the wear and friction, thus essentially remaining constant.

Mean load of 50 N/cm² with adequate lubrication
Turcite® B Slydway® Technical Data

Wear

- Testing data from testing completed at Corporate R&D

![Graph showing wear as a function of travel for Turcite B](image1)

- Lubricated friction - Loading 6 Kp/cm² (85 psi)
- Materials: Turcite B (Scraped)
  - Cast iron G 26 (Ra=0.8) (32 CLA)

![Graph showing wear as a function of travel for dry friction](image2)

- Dry friction - Loading 20 Kp/cm² (284 psi)
- Materials: Turcite B
  - Steel C 60 (Rt=3 μ) ——
  - Cast iron (Rt=3 μ) ——
Wear – Comparison between Turcite B Slydway & Rulon 142

Height of Rulon 142 and Turcite B Samples During Lubricated Test
50psi, WayLube Oil

Reciprocating Test but Specimens change Speed and Direction (Velocity) Multiple Times per Cycle

No significant height change observed in either Turcite B or Rulon 142

Height Perspective: 1/2 thickness of a sheet of paper

Height of Sample, micrometers

Time, hours
Turcite® B Slydway® Technical Data

Peel Strength Comparison between Turcite B Slydway & Rulon 142

Peel Tests on Turcite B Bonded with Waylock II, and Rulon 142 bonded with CE211

Material Strip Pulled at 2⁰/minute

Load per inch of width, lb/in

Extension, in

Turcite B required greater force to be peeled away from the adhesive, than does Rulon 142.

Average Force per inch of bonded material width, required to start tearing material away from the adhesive bond. 95% Confidence Level shown.

Examples of Load-Extension curves for Turcite B and Rulon 142.