

**Estane® S180A TPU**

TPU

Lubrizol Advanced Materials Spain S.L.

| <b>Processing/Physical Characteristics</b> | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|--|--------------|-------------------|----------------------|
| <b>ASTM Data</b>                           |              |                   |                      |
| Mold Shrinkage, MD                         | <b>0.02</b>  | mm/mm             | ASTM D 955           |
| <b>Mechanical properties</b>               |              |                   |                      |
| <b>ISO Data</b>                            |              |                   |                      |
| Abrasion resistance                        | <b>30</b>    | mm <sup>3</sup>   | ISO 4649             |
| <b>ASTM Data</b>                           |              |                   |                      |
| Modulus at 100% Elongation                 | <b>4.41</b>  | MPa               | ASTM D 412           |
| Modulus at 300% Elongation                 | <b>2.94</b>  | MPa               | ASTM D 412           |
| Shore A Hardness                           | <b>83</b>    | -                 | ASTM D 2240          |
| Tear Strength                              | <b>88.2</b>  | kN/m              | ASTM D 624           |
| Compression Set , 22 hr @ 73 °F            | <b>15</b>    | %                 | ASTM D 395           |
| Compression Set , 22 hr @ 158 °F           | <b>35</b>    | %                 | ASTM D 395           |
| <b>Thermal properties</b>                  |              |                   |                      |
| <b>ASTM Data</b>                           |              |                   |                      |
| Vicat Temperature                          | <b>85</b>    | °C                | ASTM D 1525          |
| <b>Other properties</b>                    |              |                   |                      |
| Density                                    | <b>1200</b>  | kg/m <sup>3</sup> | ASTM D 792           |

**Characteristics****Processing**

Injection Molding, Other Extrusion

**Regional Availability**

North America, Europe, Asia Pacific

**Certifications**

Food contact, Food approval FDA 21 CFR