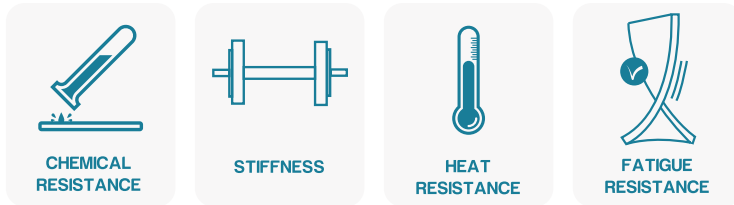


# PEEK AROLUX® PEEK

Arolux® is a Registered Trademark of Westlake Plastics Co.

Arolux PEEK has excellent low and high temperature performance, excellent electrical properties that are maintained over a wide frequency and temperature range. Arolux PEEK has excellent strength, stiffness, creep and fatigue resistance. Arolux PEEK has very good chemical resistance against a wide range of acids, bases, hydrocarbons and organic solvents. PEEK exhibit good resistance to radiation, good cut and wear properties. Inherently flame retardant with low smoke and toxic gas emission.



## Applications Include:

- Engine, Aerospace Parts
- High Temperature Bearing Material
- High Strength Structural Parts
- Valves, Seals and Gaskets
- Ducting
- Door Handles
- Clamps
- Electrical Connectors
- Mounts and Spacers
- Bearing Cages
- Fuel/Hydraulic Brackets
- Fuel Line Brackets
- Insulation Films
- Tube Connectors and Fittings
- Wire Harness brackets
- Metal Replacement / Weight Reduction

The following physical property information is based on typical values of the base Victrex® PEEKTLT 450G.

| Property                             | Units                   | ASTM Test | Result               |
|--------------------------------------|-------------------------|-----------|----------------------|
| <b>Mechanical</b>                    |                         |           |                      |
| Tensile Strength @yield              | psi                     | D882      | 17,400               |
| Elongation @break                    | %                       | D882      | 50%                  |
| Tensile Modulus                      | psi                     | D882      | 391,500              |
| Flexural Modulus                     | psi                     | D790      | 531,000              |
| Tear Strength - prop.                | g/mil                   | D1004     | 35                   |
| <b>Thermal</b>                       |                         |           |                      |
| Continuous Use Temp.-UL              | °F                      | -         | 464                  |
| Heat Deflection Temperature @264 psi | °F                      | D648      | 330                  |
| Melt Temp.-DSC                       | °F                      | -         | 644                  |
| Glass Transition Temp                | °F                      | D3418     | 289                  |
| <b>Flammability</b>                  |                         |           |                      |
| UL Rating-UL94                       | -                       | -         | VTM-1                |
| L.O.I.                               | %                       | D2863     | 23                   |
| NBS Smoke                            | Dmax                    | E662      | 1                    |
| <b>Electrical</b>                    |                         |           |                      |
| Surface Resistivity                  | Ohms                    | D257      | 1.8x10 <sup>15</sup> |
| Dielectric Strength @.003"           | V/mil                   | D149      | 3,200                |
| Dielectric Constant                  | 1 KHz                   | D150      | 3.30                 |
| Dissipation Factor                   | 10 KHz                  | D150      | 0.0026               |
| <b>Other</b>                         |                         |           |                      |
| Specific Gravity                     | -                       | D792      | 1.256                |
| Water Absorption                     | %/24 hr.                | D570      | 0.4                  |
| Refractive Index                     | -                       | -         | -                    |
| Haze                                 | %                       | D1003     | 0.5                  |
| Area Factor                          | in <sup>2</sup> /lb/mil | -         | 20,900               |

## Manufacturing Capabilities:



## Colors:

Lt grey

In addition to our standard capabilities, Westlake also has the ability to process custom resins in various sizes and colors with some exceptions.

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