



PORT PLASTICS

Semiconductor



Westlake's Arolux[®] PEKK

A HI-PERFORMANCE WET PROCESS TOOL SOLUTION

We are in the midst of exploring Wet Process tool component level solutions, materials and ideas for materials that are within the chamber and in close proximity to the wafer. A tough place to exist!

Everyone has heard of PEEK resin, but what is PAEK? and then further complicating this, what is PEKK? Are they related? Are they the same thing?

Lets first unravel the PEEK, PEKK, PAEK story. At the top of the food chain is PAEK. PAEK (Poly Aryl Ether Ketone) is a family of semi-crystalline thermoplastic polymers known for excellent thermal stability, chemical resistance, inherent flammability and high mechanical strength. Within that family is the commonly used PEEK (Poly Ether Ether Ketone) polymer. PEEK is a semicrystalline thermoplastic polymer commonly converted into a shape thru compression molding, extrusion or injection molding and machined into applications used in Wet Process tools within Semiconductor capital equipment.

Westlake Plastics Arolux[®] PEKK on the other hand is a co-polymer with a level of crystallinity that can be dialed-in to a desired level thru careful processing. One such method of processing is thermoforming. Thermoforming allows for deep draw yet thin cross section processing thus reducing waste from machining but delivering the performance of a PAEK polymer solution.

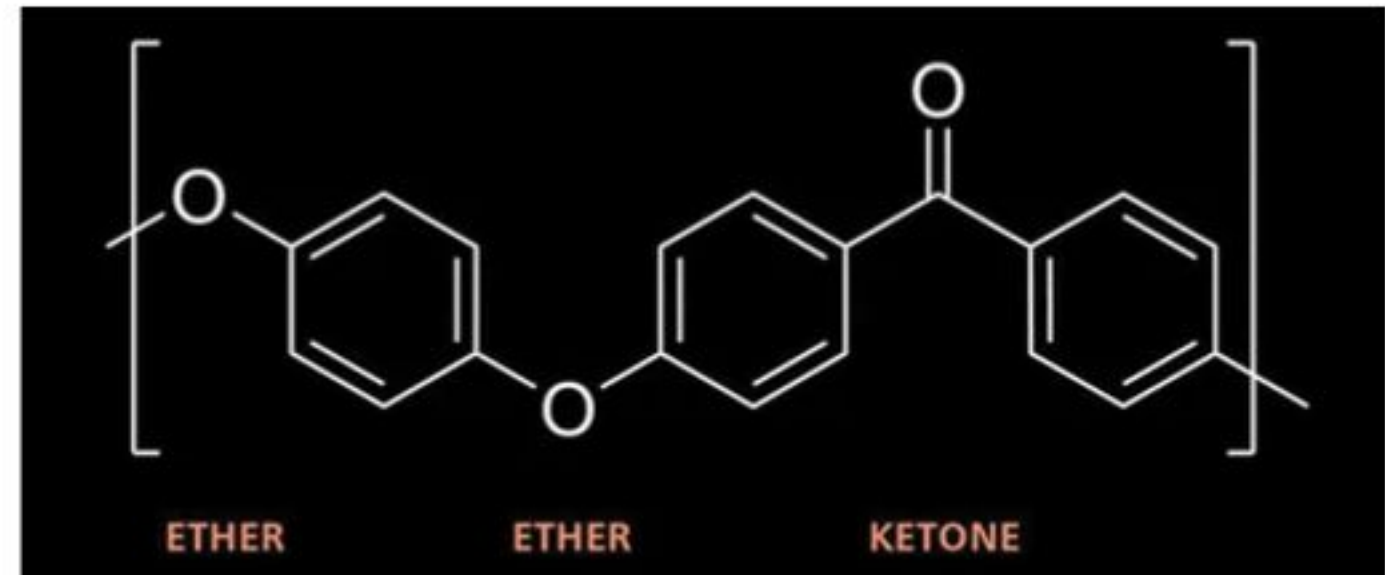
Inherent flammability (UL-94 V) and low smoke

Thermal resistance with excellent mechanical properties to 165°C

High level of Purity

Excellent Chemical Resistance

With Arolux[®] PEKK plate thickness available from 0.030" to 0.125", designers have the ability to design parts with much lower cost due minimum material waste and machining costs. The possibilities are limitless! Whether its liners that are exposed to wet chemicals, thermal insulators or trays, Arolux[®] PEKK offers huge value in the design of wet Process Tool applications.



FOR INFORMATION REGARDING PEKK SOLUTIONS OR ANY QUESTION REGARDING SEMICONDUCTOR, CONTACT YOUR LOCAL PORT PLASTICS SALES OFFICE OR CONTACT ME DIRECT!

PORTPLASTICS.COM/INDUSTRIES-SERVED/SEMICONDUCTOR/WET-PROCESS-APPLICATIONS/

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