

Facts about PES Plastic

Polyethersulfone (PES) is a polymer of exceptional durability, known to be less porous and less reactive than other similar compounds. It is a BPA-free plastic that is dimensionally stable over a wide range of temperatures, resistant to most chemicals, and possesses self-extinguishing properties. It can withstand repeated sterilization and is FDA approved to be safely used as an article intended for repeated use in contact with food (FDA Code of Federal Regulations, Title 21, Vol. 3, Part 177, Subpart C, Sec. 177.2440 - <http://www.cfsan.fda.gov/~lrd/FCF177.html>).

PES has many applications, including:

- Medical
- Food
- Baby Bottles
- Home Appliances
- Electrical
- Automotive

Articles about PES Plastic

Play it safe: Choose BPA-free bottles (2005)

http://www.prevention.com/cda/article/safer-bottles/c34b9c777f803110VgnVCM20000012281eac_____/health/healthy.relationships/healthy.kids/infant.baby.care

Cup Feeding Revisited

<http://www.tipslimited.com/cupfeeding.htm>

Robeson, L.M. et al. (1985) *Hydrolytic Stability of High Tg Engineering Polymers: Relevance to Steam Sterilization*, Union Carbide Corporation Technical Bulletin F-49806.

<http://endocrinedisruptors.missouri.edu/pdfarticles/bisphenolAreferences.pdf>

Thermoplastic Compound Serves Up Hot Meals: RTP Co. Introduces Polyethersulfone Compound for Use in Food Warming Trays. Society of Plastics Engineers, Inc, Vol. 57, Issue 2, P.8 (2001).

Medical Applications for PES Plastic

Growth of Human Cells on Polyethersulfone (PES) Hollow Fiber Membranes. R. E. Unger et al. *Biomaterials*.

Volume 26, Issue 14, May 2005, Pages 1877-1884. ScienceDirect: <http://www.sciencedirect.com/>.. doi:10.1016/j.biomaterials.2004.05.032

Medical Applications

<http://www.millipore.com/pressroom/cp3/5I7t9j>

Polyethersulfone Membrane

[http://www.whatman.co.uk/repository/documents/s3/S9036-2154%20\(51635\).pdf](http://www.whatman.co.uk/repository/documents/s3/S9036-2154%20(51635).pdf)

Know Your Plastics : Polysulfone Resins

<http://www.plastemart.com/upload/Literature/polysulfone.asp>

Books on PES Plastic

Harper, Charles A. & Edward M. Petrie. *Plastics Materials and Processes: A Concise Encyclopedia*. Wiley-Interscience: 2003.

Harper, Charles A. *Handbook of Plastics: Elastomers, and Composites*. McGraw-Hill Professional: 2002.

Locatelli, F., Ronoco, C, & Tetta, C., Eds. *Polyethersulfone: Membranes for Multiple Clinical Applications*: Karger: 2003.