

Asymmetric PES Membranes Enable On-Device Blood Testing

A partnership with TriStar gives you a competitive edge.



Asymmetric Hydrophilic Membranes are the Key to IVD Testing

Whether the plasma sample is needed for highlighting antibody markers (monograms that help identify and classify cells) or for molecular testing, **Ultraflon M10** PES (polyethersulfone) membranes can provide fast plasma separation by gravity or slight vacuum.

Ultraflon M10 is an asymmetric membrane which is modified to minimize assay interference (the effect of a substance present in the sample that alters the correct value of the result). The process we use enhances the red blood cell accumulation, which allows fast plasma flow-through. Additional benefits:

- High efficiency
- No hemolysis (destruction of the red blood cells)
- Low protein and analyte binding
- Low CVs on flow rates

While these membranes are used primarily for filtration of water or whole blood, their asymmetric (variable pore diameter) structure makes them useful for many filtering processes where precipitate or solids recovery is not important.

A growing trend in the manufacturing of in vitro medical devices is the incorporation of blood plasma separation membranes directly on the device to minimize user steps, contamination, and reduce variability.

The term *In Vitro Diagnostics [IVD]* is used to describe devices that analyze samples (in this case, blood) taken from the human body, as opposed to testing inside the body.

Working closely with medical manufacturers, TriStar has developed *specialized membranes* to enhance the effectiveness of these devices.

One such material is our **Ultraflon M10**.

We're ready to put our engineering expertise to work for you from prototype to production.

Engineering | Custom Fabrication | Manufacturing



CJ Composite

- Self-Lubricating
- Low weight | High Strength
- Chemical Resistance
- Direct replacement for Bronze



Ultracomp[®]

- Self-Lubricating
- High Load | Low Speed
- 54,400 PSI Compressive Strength
- Exceptional Resistance to Vibration and Impact



TriSteel[™]

- Self-Lubricating
- High Load | High Speed
- Metal Backed Bearing System
- 100% Lead Free



Rulon[®]

- Self-Lubricating
- Low weight | High Strength
- Low Coefficient of Friction
- Chemically Resistant



Enhanced Materials Division

- Plasma Surface Treatment
- Asymmetric & Symmetric Filtration Membranes
- Specialized Primers & Coatings
- Material ID & Selection



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