



Ultem improves diabetes care

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Medical device manufacturer Biorep Technologies, which specialises in tools used in the treatment of diabetes, turned to Sabic Innovative Plastics to assist its development of a new system for isolating insulin-producing cells faster and more efficiently.

Biorep's technology enables islets - insulin-producing cells from a donor's pancreas - to be isolated and purified for transplantation in patients whose diabetes cannot be controlled with insulin injections.

The Ricordi Chamber that is used to break down the pancreas mechanically and chemically to isolate the islets was originally custom-made from stainless steel. However, it was heavy to shake during the 30-45 minute process and prevented doctors from visually assessing the process.

The Ricordi Chamber is now moulded from Sabic's Ultem polyetherimide, a translucent, high-temperature, autoclavable material. The polymer's light amber colour allows doctors to see the pancreas inside the chamber and its chemical resistance resists enzyme attack.

The changeover to Ultem also allows higher volume production, cutting delivery times to doctors significantly, and reduces manufacturing costs.

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