



**Graver Technologies**

**QUALITY CERTIFICATE  
CERTIFICATE OF CONFORMANCE  
ZTECB Filter Elements**

Product Construction: Support Material: Polypropylene  
 Filter Media: Polyethersulfone  
 Filtration Area: Approximately 7.5 square feet / 10 inches

Bioburden Reduction: 0.2, 0.45, 0.65, 0.8 micron  
 Minimum log reduction value (LRV) of  $\geq 7$  when challenged according to ASTM 838-05.

Sanitization: Product can withstand: Hot Water at 176°F (80°C) at max of 1 psid for 30 minutes.  
 Inline Steam at 257°F (125°C) at max of 5 psid for 30 minutes.  
 Autoclaving at 257°F (125°C) for 30 minutes.

Integrity: 100% by diffusion in water

Pore Size	Max Diffusion (SCCM)	Published DF	Published BP
0.2	$\leq 35$ ml/min @ 30 psig	$\leq 35$ ml/min @ 30 psig	$\geq 38$ psig
0.45	$\leq 35$ ml/min @ 20 psig	$\leq 35$ ml/min @ 20 psig	$\geq 25$ psig
0.65	$\leq 35$ ml/min @ 15 psig	$\leq 35$ ml/min @ 15 psig	$\geq 18$ psig
0.8	$\leq 35$ ml/min @ 13psig	$\leq 35$ m./min @ 13 psig	$\geq 16$ psig

Expiration Date: 4 years from ship date providing filters are stored unopened in a dry and ambient environment. Ideal temperature is 25°C.

USP Class VI Meets USP Class VI Biological Test for Plastics

FDA Listed Materials All Materials comply with FDA Title 21 of the Code of Federal Regulations Sections 174.5, 177.1520, and 177.2440 as applicable for food and beverage contact.

European Directive for Direct Food Contact European Regulations No 1935/2004, European Regulation 10/2011 with amendments and corrections from European Regulation No. 2020/1245, and European Regulation 2023/2006: Tested for migration behavior in direct food contact. Minimal rinse required for use. GMP is utilized to make the filters. Data is available upon request.

Graver Technologies certifies that the ZTEC-B series filter elements are produced and distributed according to a Quality Management System that is registered for compliance to EN ISO 9001:2015. All data concerning materials used and production data are documented and accessible under the individual lot number.