



## The ASEPCO Polymixer™ Cleaning Performance Findings By the Premier, Third-party CIP Consulting Firm J. M. Hyde Consulting, Inc.

The design of the Polymixer™ magnetic mixer is targeted to offer excellent stirring, mixing and blending reliability with superior cleaning performance.

To measure and compare the cleaning performance of the Polymixer, ASEPCO contracted the services of J. M. Hyde, a leading consulting company in the biopharmaceutical industry for CIP design and validation. ASEPCO selected this CIP specialist to:

- 1) Oversee the design of a clean in place (CIP) process.
- 2) Develop a reproducible clean in place (CIP) process, and test protocols similar to those employed in critical biopharmaceutical industry processes.

Each cycle consisted of the following basic steps:

- |                 |                              |
|-----------------|------------------------------|
| 1. Rinse        | 4. Acid Wash                 |
| 2. Caustic Wash | 5. Once Through Rinse        |
| 3. Rinse        | 6. Final Recirculating Rinse |

- 3) Provide scientific data to substantiate any claims.



To view the complete study, registered users can log in to ASEPCO Online at <https://online.asepco.com/> and scroll down to the download section. (If you haven't registered yet, you can do so on the same page.)

When the ASEPCO Polymixer was compared directly with two competing brands of agitators using the same equipment configuration and cleaning methodologies, **the aggregate Total Organic Carbon (TOC) surface swab results were consistently lower on the Polymixer than on the other agitators tested.**

	Polymixer™	Agitator A	Agitator B
Cleaning Sample Results TOC (ppb)	189	224	263

The results shown are a measure of the TOC left on the mixers after the final rinse process.

When comparing TOC results from equivalent sites, from one agitator to another, Agitator B exhibits the highest results (excluding run 10), with Agitator A producing the second highest results, and the Polymixer producing the lowest TOC results.