

INDEPENDENT SCIENTIFIC STUDY DEMONSTRATES PFAS IS NOT IDENTIFIED OR LEACHED IN IPACKCHEM ADVANCED IN-MOLD FLUORINATED CONTAINERS

PARIS, Sept. 13, 2022 -- An independent study designed and overseen by Environmental Standards, Inc. and conducted by Pace Analytical Services LLC found that no PFAS were identified or found to leach into the contents of IPACKCHEM's proprietary Advanced In-Mold Fluorinated (IMF) containers.

"This study confirms that IPACKCHEM's Advanced IMF barrier process creates packaging that is safe, secure and sustainable, and is a solution to PFAS leaching from fluorinated containers. We believe our technology and process can help deliver the benefits of fluorinated HDPE packaging while safeguarding public health and protecting the environment," said JP Morvan, chief executive officer of IPACKCHEM.

In March of 2021, [EPA](#) found that certain HDPE containers posed the risk of leaching PFAS into the contents of the containers. EPA's study confirmed that it detected eight different PFAS from the fluorinated HDPE containers, with levels ranging from 20-50 parts per billion.

Since then, [EPA](#) has noted that fluorination processes that use fluorine gas without the presence of oxygen can reduce the risk of PFAS formation. In addition, the [FDA](#) has authorized the use of barrier technology containers for food use only when the fluorination of the containers is done via manufacturing processes that use nitrogen.

IPACKCHEM's proprietary Advanced IMF process uses a dilute mixture of Fluorine in Nitrogen that reacts with only the inner surface of the container to create a barrier to chemical migration, ensuring product integrity and purity.

The Pace Advanced IMF Container Study Findings

The independent study, a [summary](#) of which was released today, was conducted by scientists at Pace Analytical Services with the testing designed and overseen by Environmental Standards, a specialized chemistry consultancy with significant experience in these types of testing.

- The study was conducted using a highly robust process with multiple samples, an aggressive solvent and longitudinal testing over varied timeframes.
- The study evaluated whether any of 19 target PFAS compounds¹ were found in a methanol solvent after one to three months exposure, for the different types of containers that were commercially available outside the United States.
- None of the target PFAS was detected in the samples from the IPACKCHEM Advanced IMF containers at or above the Limit of Quantification (LOQ).

The study was conducted through a contract with Steptoe & Johnson and funded by IPACKCHEM.

"We believed it was important to subject our Advanced IMF industrial containers to scientific testing to determine if they performed safely and consistent with our highest standards. We are gratified by the results of that testing, which can give users confidence that they can use our containers safely," Morvan said.

¹ The Study was designed to test for 19 PFAS compounds, a group that includes the 8 PFAS compounds that were detected in the US EPA studies.

IPACKCHEM

IPACKCHEM was founded three decades ago with the mission to improve the handling of specialty chemicals from both an environmental and safety standpoint. It has since grown to become a global leader in high performance plastic packaging and now serves customers from production locations in four continents.

At its inception, IPACKCHEM introduced innovative rigid plastic packaging products with barrier properties to ensure the safe transportation, storage and handling of chemicals used in crop protection, animal health, flavors & fragrances, pharmaceuticals and laboratory applications.

IPACKCHEM's rigid barrier plastic containers meet stringent procedural quality controls and are certified by the United Nations for transport of hazardous goods.

IPACKCHEM's proprietary packaging solution with Advanced IMF barrier technology is 100 percent recyclable and can also be manufactured using a high percentage of post-consumer recycled content (up to 50%).

Contact: Claire Parker claire@cbcommunicationsllc.com
Victor Lusvardi victor.lusvardi@ipackchem.com