



Zyvox®
AEROSPACE

Zyvox® Aerospace Applications

In aerospace manufacturing, precision is paramount, and each engineer's and production manager's expertise contributes to the seamless creation of specific composite components. Whether working on the fuselage, wings, tail surfaces, doors, floor panels, cabin partitions, ceiling panels, luggage bins, or seats, engineers encounter unique challenges. Zyvox® understands these intricacies and offers a tailored range of Cleaners, Sealers, Primers, and Release Agents to mitigate common molding issues.

APPLICATION FOR SUPERIOR RELEASE

Our products are crafted to enhance the production of each part, ensuring optimal performance and reliability. With Zyvox®, engineers and production managers can trust in solutions that are as specialized and high-caliber as the parts they mold.

Step 1: Clean

- Zyvox® Mold Cleaner 10W:** This solvent-free cleaner and degreaser is a must to refresh molds between parts without damaging the semi-permanent release coating. Furthermore, Zyvox® Mold Cleaner 10W is very low VOC (less than 1%).

Step 3: Seal

- Chemlease® Sealer 1028W EU:** This strong and dry water-based sealer is used to seal mold porosities or when strong process could damage the release film and make release more difficult.

Step 4: Release Agent (Choose one)

- Zyvox® Departure™:** That water-based high slip semi-permanent release agent holds the distinction of being the inaugural release agent to receive approval from Airbus under the Individual Product Specification (IPS 12-02-002-01), a testament to its quality since 2006. It is offered in both liquid form and as convenient pre-impregnated wipes, catering to diverse application needs in aerospace manufacturing.

ZYVAX® RELEASE SOLUTIONS DELIVER:

- Multiple, easy releases
 - Environmentally friendly, PFAS-free
 - Multiple slip levels for all applications
 - Low buildup
 - Low transfer
 - Manual and automatic application
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- Zyvox® TakeOff™:** a water-based, low-slip, semi-permanent release agent, is the solution of choice for applications requiring reduced slip. Designed for both manual and automatic application methods, such as spraying or dripping, Zyvox® TakeOff™ has been an Airbus-approved product since 2017 (IPS 12-02-002-03) and is conveniently available in liquid form or as pre-impregnated wipes to suit various operational preferences.
 - Zyvox® 1070W EU:** Zyvox® 1070W EU stands out as a water-based, silicon-free release agent, endowed with a distinctive Tack property that enhances the adhesion of the initial pre-preg ply in ATL or AFP processes, while ensuring superb release characteristics. Its formulation is designed for ease of cleaning and minimal build-up, and it is readily available in liquid form for either wipe or spray application methods.
 - Zyvox® 825WB:** That's a water-based release agent specifically formulated for use with phenolic resin, making it ideal for processing interior aerospace parts. It offers versatility in application, being available in liquid form suitable for both wiping and spraying techniques.
 - Zyvox® Watershield EU:** Zyvox® Watershield EU has been used since many years in Aerospace when high slip and high lubricity is needed. It is recommended for the RTM process and is a must for anodized aluminium molds.

Composite Selector Guide

MOLD MAINTENANCE TO SAFEGUARD YOUR INVESTMENT

In aerospace manufacturing, maintaining molds is crucial for ensuring high-quality production and safeguarding the significant investment in molding tools. Chem-Trend has developed specialized solutions to clean and prime these tools effectively.

Step 1: Clean

- **Zyvax® Freshstart:** Zyvax® Freshstart is a robust, abrasive mold cleaner that eliminates strong buildup using a single chemical and no solvents, ensuring a clean surface that's ready for water wetting.

It's effective in removing contaminants and semi-permanent release agents from molds and can also prep surfaces of manufactured parts for further processing like painting.

Step 2: Prime

- **Zyvax® MPP C1006W:** Zyvax® MPP C1006W is a water-based primer designed for composite molds, offering restoration and protection from chemical and mechanical damage. It's crafted to seal and promote adhesion on various molds and tooling materials.

	APPLICATION TYPE	NUMBER OF COATS	CURE TIME BETWEEN COATS (MINUTES)	FINAL CURE TIME PRIOR TO MOLDING (MINUTES)
CLEANERS				
Zyvax® Freshstart	Wipe on, buff off, rinse with water	n/a	n/a	n/a
Zyvax® Waterclean	Wipe on, buff off, rinse with water	n/a	n/a	n/a
Zyvax® Mold Cleaner 10W	Wipe on, dry off	n/a	n/a	n/a
PRIMERS				
Zyvax® MPP C1006W	Wipe on, leave on	1 to 2	30	60
SEALERS				
Zyvax® Sealer 1028W EU	Wipe on, wipe off	1 to 2	15	60
RELEASE AGENTS				
Zyvax® Watershield EU	wipe on, wipe off	3 to 5	15 min	30 min
Zyvax® Departure™ (IPS 12-02-002-01)	wipe on, wipe off	3 to 5	15 min	30 min
Zyvax® TakeOff™ (IPS 12-02-002-03)	wipe on, allow to dry	3 to 5	15 min	30 min
Zyvax® 1070W EU	wipe on, allow to dry	3 to 5	Dry	Dry
Zyvax® 825WB	wipe on, allow to dry	3 to 5	15 min	60 min

Scan the QRcodes or click on the linked words for more information on our website.



Zyvax®
Departure™



Zyvax®
TakeOff™



Zyvax®
1070W EU

When experiencing low humidity conditions in the shop, the customer may find the need to extend the time between coats and increase the number of coats applied to the mold. While the technical information and suggestions for use contained herein are believed to be accurate and reliable, nothing stated in this bulletin is to be taken as a warranty, either expressed or implied. Please refer to individual data sheets for further application, safety and handling information.

Contact Chem-Trend to find out more about how our release agents and specialty products can improve your composites operations.

DE.CHEMTREND.COM



Release Innovation™

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