



SOLVAY

asking more from chemistry®

Specialty Polymers for
High-Performance Coatings

**SPECIALTY
POLYMERS**



Best-in-Class Materials for each Coating Layer Technology

As a supplier to the coatings industry for over 40 years, Solvay focuses its material technologies on the performance, efficiency and sustainability of coatings systems that help our customers stay competitive in today's changing marketplace.

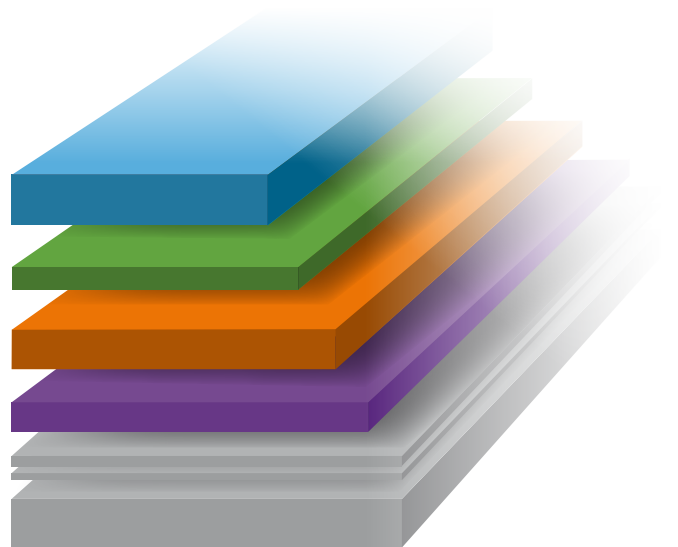
Clearcoat
PFPE, PVDF, ECTFE, PFA/MFA[®], PESU

Basecoat/Topcoat
PVDF, ECTFE, PTFE, PFA/MFA[®], PESU, PEEK, AI

Primer
PVDC, AI, ECTFE

Autodeposition
PVDC

Pretreatment



Growth of the global coatings market is driven by innovative technologies, cost-effective processes, and sustainable solutions that help manufacturers meet new regulatory challenges contributing to a green environment.

Fluoropolymers

**Hylar® PVDF, Halar® ECTFE,
Polymist® PTFE, Hyflon® PFA/MFA®**

Fluorinated polymers greatly enhance the properties of coatings, making them desirable for applications in severe end-use environments needing long-lasting surface protection, high thermal stability, and best-in-class chemical resistance.

High-barrier Polymers

Diofan® PVDC, Ixan® PVDC

PVDC uniquely combines exceptional oxygen and water vapor barrier properties, providing safe and reliable pharmaceutical and food packaging and delivering best-in-class metal corrosion protection.

Fluorinated Fluids

Fluorolink® PFPE

PFPE can be used as a surface treatment and as an additive to modify polymers to reduce surface energy and impart self-lubricity as well as water and oil repellency.

Aromatic Polymers

Torlon® AI, KetaSpire® PEEK, Veradel® PESU

Aromatic polymers have excellent chemical resistance and offer high processing temperatures. They are used in high-temperature coatings and to promote polymer adhesion to a variety of substrates.

Reducing Total Cost of Ownership

Sustainability

Solvay offers a variety of specialty polymers for low-VOC and zero VOC coatings that improve air quality and reduce health concerns by lowering or eliminating VOC emissions. Products developed specifically for these formulations include waterborne Diofan® PVDC, Hylar® PVDF and Fluorolink® PFPE.

High Performance

Hylar® 5000 PVDF and new waterborne Hylar® PVDF technology for sustainable low-VOC architectural coatings exhibit outstanding resistance to UV irradiation, humidity, chemicals, chalking, staining, color change and loss of gloss. They deliver a long-lasting durable finish for unsurpassed surface protection and eliminate the need for repainting. Halar® ECTFE used for primers, topcoats and clear coats provides exceptional chemical resistance and durability for surface protection applications in the chemical processing industry.

Efficiency

Coatings manufacturers are switching from standard three-layer, solventborne coating systems to new two-layer, zinc-free, waterborne coating systems, such as marine, transportation and protective coatings made using Diofan® PVDC, KetaSpire® PEEK, Torlon® AI, and Veradel® PESU are of special interest to formulators seeking to improve processing efficiencies by reducing coating thickness without compromising performance.



Get the Coatings You Want with the Performance You Need

Anti-Corrosion Protective Coatings

Diofan® PVDC

Waterborne PVDC polymers boast superior barrier properties to both oxygen and water vapor. This allows these coatings to provide best-in-class metal corrosion protection and offer category C5-M compliance for use in exterior coastal and offshore areas with high salinity.

Functional Coatings

Fluorolink® PFPE, KetaSpire® PEEK, Torlon® AI and Veradel® PESU

Specialty polymers are also used in innovative material technologies to impart improved functionality to coatings such as low friction, wear resistance, anti-stick, hardness, and improved resistance to heat and chemicals.

High-Temperature Coatings

KetaSpire® PEEK, Torlon® AI, Veradel® PESU, Halar® ECTFE and Hyflon® PFA/MFA®

Specialty polymers applied as powder coatings or waterborne solutions provide lasting adhesion to polymer or metal substrates used in cookware and bakeware applications. They also provide excellent chemical and oxidative resistance, making them well-suited for coatings used in aggressive environments such as those found in the chemical processing and semiconductor industries.

Waterborne Coatings

Diofan® PVDC, Torlon® AI, Hylar® PVDF and Algoflon® PTFE

A broad range of waterborne polymers with superior properties, excellent adhesion, low toxicity and flammability due to low/zero VOC levels.

Powder Coatings

Halar® ECTFE

Successfully used for many years as the ideal corrosion protection material in a wide variety of industries. Halar® ECTFE combines long-lasting performance with excellent chemical resistance, outstanding permeation resistance, exceptional surface properties, good adhesion and high purity.

Architectural and Construction Coatings

Hylar® 5000 PVDF and Polymist® PTFE

Architectural coatings based on Hylar® 5000 PVDF are used as long-lasting finishing systems applied to metal substrates. These coatings exhibit exceptional color and gloss retention for over 35 years by resisting UV radiation degradation and repelling airborne pollutants, salt, wind-driven sand and chemicals. Polymist® PTFE is used where improvements in non-stick, mar resistance, slip, and moisture repelling characteristics are desired.

Inks and Packaging Coatings

Diofan® PVDC, Ixan® PVDC and Polymist® PTFE

Diofan® PVDC coatings applied to paper and cardboard provide excellent gas and moisture barrier performance, heat sealability, oil and chemical resistance, and anti-static properties. Ixan® PVDC is an excellent binder for inks used to print on various substrates thanks to its adherence, water resistance, and chemical inertness. Polymist® PTFE is used as additives in paints, inks and coatings to impart a non-stick surface, mar resistance, slip, chemical resistance, moisture repellency, gloss retention and improved abrasion.

High-Performance Solutions for all Coatings' Applications

Anti-smudge Glass Coatings



Fluorolink® PFPE

Anti-graffiti Coatings



Fluorolink® PFPE

Marine Coatings



Diofan® PVDC

Architectural and Construction Coatings



Hylar® 5000 PVDF,
Polymist® PTFE

Inks and Packaging Coatings

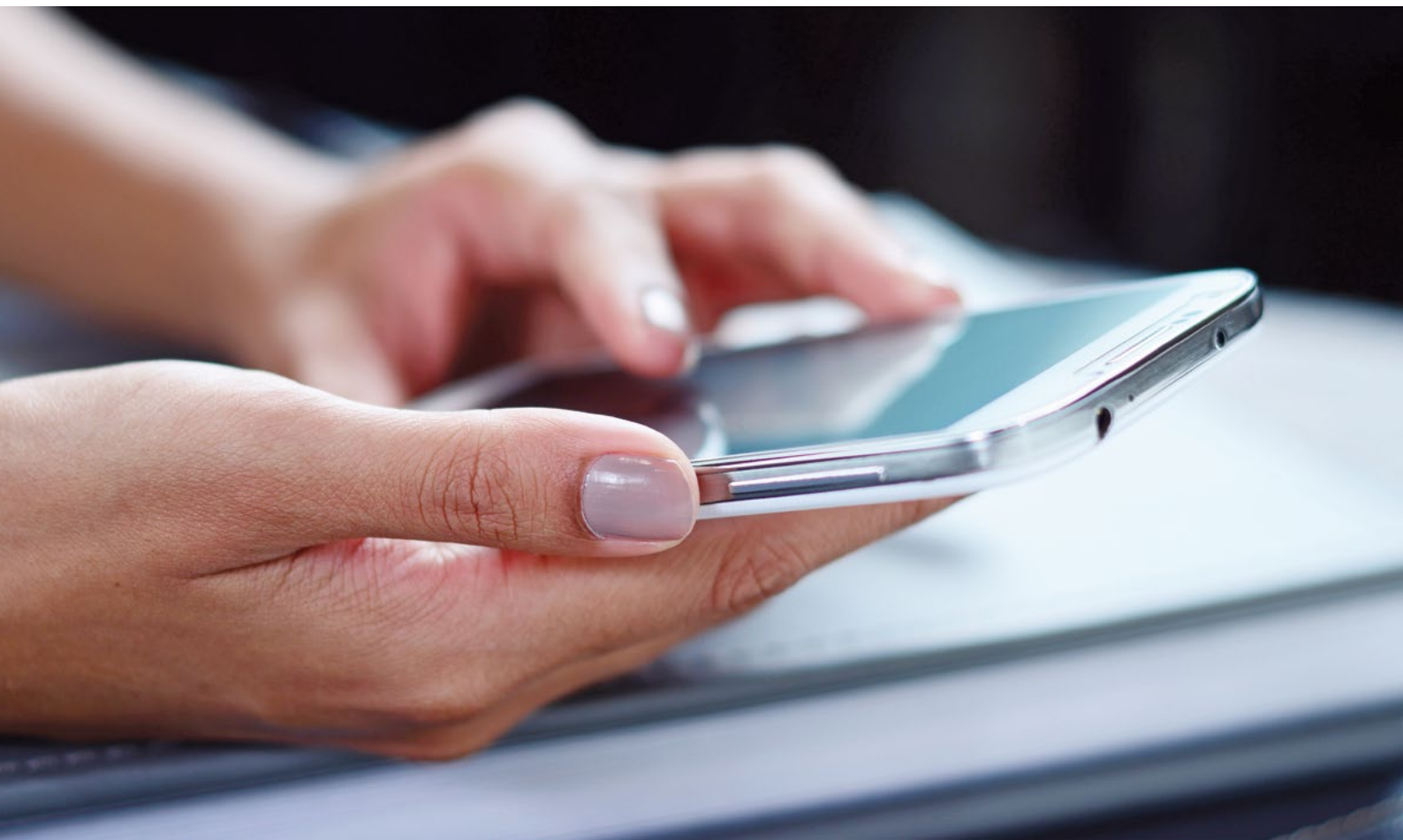


Diofan® PVDC and
Ixon® PVDC,
Polymist® PTFE

Transportation Coatings



Diofan® PVDC,
Fluorolink® PFPE,
Hylar® PVDF



Low Friction Coatings



KetaSpire® PEEK,
Torlon® AI

High-temperature Coatings



KetaSpire® PEEK,
Torlon® AI,
Veradel® PESU,
Halar® ECTFE,
Hyflon® PFA/MFA®

Cookware and Bakeware Coatings



Torlon® AI,
Veradel® PESU,
Polymist® PTFE

Textile and Fabrics Coatings



Diofan® PVDC,
Polymist® PTFE,
Hyflon® PFA/MFA®

Can Coatings



Polymist® PTFE





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