

The Global Market for Durable Water Repellent (DWR) Coatings 2024-2034

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Abstracts

Durable Water Repellent (DWR) Coatings create hydrophobic surfaces that repel water but allow water vapor to pass through. Fluoropolymers like PTFE are the most common type of chemistry used for DWR coatings due to their non-reactivity and excellent water repellency, but environmental concerns are shifting focus to hydrocarbons, silicones, nanocoatings, bio-based alternatives and smart coatings. Textiles are the largest application segment. Major factors driving growth are demand for water-resistant fabrics and the need to extend building lifespans by preventing water damage and mould growth.

Report contents include:

Coatings analysis including chemistry, properties, application process and environmental issues. DWR coatings types covered include:

Fluoropolymers.

PTFE (polytetrafluoroethylene).

Fluorinated acrylates/methacrylates.

Shorter-chain fluorotelomer-based polymers.

Branched fluoropolymers.

Plasma-induced grafting.

Hydrocarbons.

Paraffins.

Polyurethanes

Silicones, Silanes, & Siloxanes.

Polydimethylsiloxane (PDMS).

Modified silicones.

Block copolymers.

Nanocoatings.

Hybrid coatings.

Bio-based

Wax emulsions.

Aliphatic polyesters.

Chitosan.

Protein-based.

Plant-derived C6, C8, and C10 chemistry platforms.

Lignin-derived polymers.

Nanoscale citrus-derived.

Smart DWR coatings

Temperature-responsive DWR coatings.

pH-responsive DWR coatings.

Light-responsive DWR coatings.

Self-healing DWR coatings.

Conductive DWR coatings.

Limitations of current DWR chemistries.

Market drivers and challenges.

Analysis of markets for DWR coatings including:

Outdoor apparel

Fashion apparel

Performance footwear

Workwear

Medical wear

Military apparel

Upholstery

Awnings, tents, and bags

Transportation

Building & Construction

Electronics

Industrial coatings.

Analysis of key market players, textile mills and fabric finishers providing durable water repellent (DWR) treatments.

Global market revenues for DWR Coatings, by chemistry, end-use market and regions, historical and forecast to 2034.

Profiles of 172 chemical manufacturers, product developers, coating producers and start-ups. Companies profiled include 3M, Actnano, Amphico, BASF, Chemours, Dimpora, Dow, Earthodic, Elkem, Green Theme Technologies, Inc., Hitachi Chemical, Kukdo Chemical Co., Ltd., Lamoral Coatings, NICCA Chemical, P2i, and Toray.

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