

OUTDOOR INDUSTRY ASSOCIATION SUMMARY BRIEF

Durable Water Repellent (DWR)

Version 1.0, June 2019



PURPOSE

This guide is intended to be used as an educational tool and a resource for action, with the goal of driving continuous improvement in chemicals management practices in regard to DWR. While this document may serve as general education, brands, manufacturers and suppliers in the outdoor industry will benefit most.

This document was produced by the OIA Chemicals Management Community of Practice (CMCoP) as an invitation and an extension of their mission to promote the use of sustainable chemical products, processes and management practices through collaborative efforts across the value chain within the outdoor industry.

SUMMARY

DWR is a chemical finish applied to a substrate (such as textile or leather) which adds water repellency, and sometimes also oil repellency and stain resistance, while maintaining a desirable level of hand feel and breathability. DWR can also be referred to as Water Repellency (WR), Stain Release, Soil Release or “Waterproofing” and is a critical, and in many instances necessary, attribute of outdoor industry products (see [DWR Priority Issues Brief](#) for details).

Concerns have been raised regarding the impact of long-chain fluorinated DWR on human health and the environment and imply similar concerns about all types of fluorinated DWR products. We expect continued learning, engagement, collaboration, and pressure from NGOs and regulators on the subject. As a result, some brands have responded by making public commitments to phase out the use of fluorinated DWR in their products altogether (see [DWR Priority Issues Brief](#) for further context of the issues). As fluorinated DWR is replaced by non-fluorinated alternatives, it is important to ensure that all chemistry products are assessed for consumer safety, environmental, and product performance.

Today, a wide array of fluorinated and non-fluorinated DWR products are commercially available for you to incorporate into your products should you need them. Many of these have also been assessed by independent 3rd parties (e.g., bluesign®, OEKO-TEX®, Green Screen®, etc.) for quality, consumer safety and environmental concerns.

FIVE INDUSTRY ASKS – PRACTICAL MATTERS FOR ACTION

Based on nearly a decade of industry collaboration, knowledge sharing and technology advancements, the OIA CMCoP encourages the following best practices in regard to the use of DWR and finishes. These steps may be approached in any order, understanding they serve as guideposts in a continual, working process.

KNOW:

1. Identify which of your products have or may contain DWR, and their performance specifications and product claims (e.g. in a Bill of Materials [BOM]).
2. Understand what specific DWRs by class, name, and manufacturer are currently being used on these products (this will be ongoing).

ASSESS:

3. Assess if DWR is needed and if yes, choose DWRs that align with your performance and RSL requirements.
4. Arrange trials to produce samples and conduct testing, working with your supplier partners to ensure continual alignment & production efficiency.

DECIDE:

5. Determine your goals and commitments. Communicate your progress publicly and share your knowledge with others in the industry.

DWR TOOLKIT

To guide your efforts on the Five Industry Asks above, review the following OIA resources designed to drive best practices and continuous improvement in the industry. They are free and publicly-available here: <https://outdoorindustry.org/sustainable-business/chemicals-management/>

KNOW (FOUNDATIONAL)

- [DWR Priority Issues Brief](#) (2016)
 - Target: Brands/Manufacturers, Suppliers, Retailers, NGOs, etc.
 - Purpose: To acquire general education including an overview of the issue, history, definitions, resources and efforts of the OIA SWG.
- [Chemicals of Concern 101 One-Pager](#) (2018)
 - Target: Brands/Manufacturers
 - Purpose: To understand best practices for identifying and addressing chemicals of concern (like [PFOA/PFOS](#)) in your supply chain.
- [DWR Mill Questionnaire](#) (2015, updates forthcoming)
 - Target: Brands/Manufacturers
 - Purpose: To collect information on DWR use from mills or suppliers.
- Road Map Document (Forthcoming)
 - Target: Brands/Manufacturers
 - Purpose: To learn common practices and case studies on how others have successfully approached barriers and transitioned to alternatives.
- [Collaboratively work on relevant challenges and opportunities with the OIA CMCoP](#)
 - Target: Brands/Manufacturers, Suppliers, Retailers, NGO's, etc.
 - Purpose: To leverage industry available resources to make improvements in chemistry, occupational and consumer health & safety, and chemical and environmental management. Connect, learn & ask questions!

ASSESS (PROGRESSIVE)

- Sample DWR Performance Specification Template (2019)
 - Target: Brands/Manufacturers
 - Purpose: An example to help inform how your company could define and communicate your product's performance requirements to your supply chain.
- [Higg Index Facility Environmental Module \(FEM\)](#)
 - Target: Suppliers (& Brands seeking information on Supplier practices)
 - Purpose: To measure environmental and social sustainability impacts in manufacturing facilities around the world.
- Industry resources, such as:
 - Your existing suppliers' knowledge & expertise
 - Industry trade shows such as [Outdoor Retailer](#), [ISPO](#), etc.
 - Industry trade publications such as [EcoTextile](#), [Sourcing Journal](#), [Chemical Watch](#), etc.
 - Third-party service providers such as [bluesign®](#), [OEKO-TEX®](#), [Full Material Disclosure \(ToxFMD®\)](#), [ZDHC Chemical Gateway](#), and others.

DECIDE (ASPIRATIONAL)

- Share what you've tried, decided and learned with industry colleagues in the OIA CMCoP via discussion, webinars, case studies, etc.
 - Target: Brands/Manufacturers, Suppliers, Retailers, NGOs, etc.
 - Purpose: To help inspire, drive and lead best practices that are positive for people & planet.

ARCHIVED TOOLS

These historical resources are not updated to reflect the most up-to-date information or industry guidance, but they may serve as helpful context.

- [Backgrounder on DWR Treatment](#) (2012)
 - Target: Brands/Manufacturers, Suppliers, Retailers, NGOs, etc.
 - Purpose: To acquire general education including issue overview and history (now embedded within the Priority Issues Brief).
- [DWR Use Cases](#) (2012)
 - Target: Brands/Manufacturers, Mills
 - Purpose: To compile performance definitions and commonly used test methods for durability, wash, etc. for fabric specifications.
- [DWR Foundational Research Report](#) (2012)
 - Target: Brands/Manufacturers
 - Purpose: To compile and summarize information about commercially available alternative DWR technologies and chemistries and describe the steps involved in moving from long-chain to short-chain and non-fluorinated technologies and chemistries.
- [DWR Chemical Company Master List](#) (2013)
 - Target: Brands/Manufacturers
 - Purpose: To identify DWR products and publicly available information regarding use, technology, fabric types, certifications, etc.
- [DWR Request For Proposal](#) (2013)
 - Target: Universities, Research Institutes, Technical Consultancies, Test Labs, etc.
 - Purpose: To solicit proposals to provide technical assistance, research and analysis to support efforts of OIA, ZDHC, EOG & BSI to eliminate or address fluorinated repellency chemistries.

QUESTIONS? COMMENTS?

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