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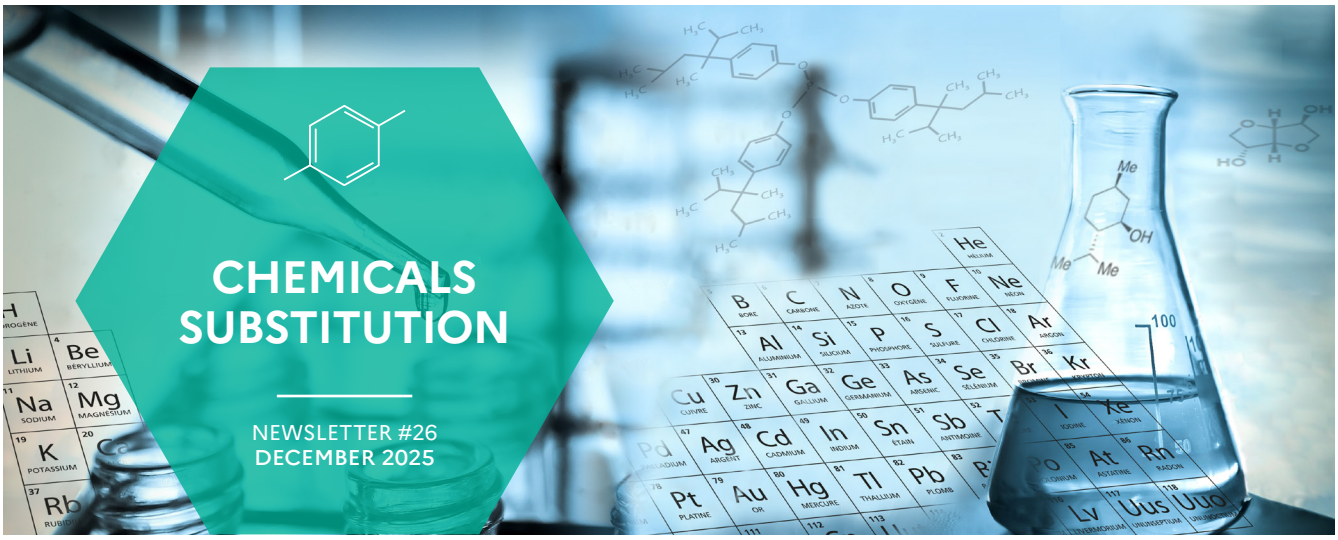

CHEMICALS SUBSTITUTION

NEWSLETTER #26
DECEMBER 2025

A NEW NON-PFAS[1] STAIN-RELEASE ADDITIVE FOR POLYESTER FIBERS

Avient has enhanced its Cesa™ Fiber Additives range with fluorine-free, and therefore non-PFAS stain-release additives for polyester fibers (the composition of the additives is not known to INERIS).

According to Avient, these products would prevent dirt from becoming embedded in the fibers, making it easier to remove stains with usual household products.

Cesa stain-resistant products are additive concentrates (masterbatches) formulated to be incorporated into polyester yarn during the extrusion process.

Avient indicates that the additive can also be incorporated into the dyeing process, enabling the color and stain-proofing treatment to be simultaneously incorporated into the fiber using the spin-dyeing process[2].

Also suitable for fine-titer fibers, Cesa stain-resistant additives can be used in numerous applications, including automotive textiles, carpets and rugs, and interior furnishings.

Avient reports that the formulation contains no intentionally added bisphenols, phthalates or alkylphenol ethoxylates and has no impact on the mechanical properties of polyester fibers.

For more information:
https://www.avient.com/news/new-non-fluorine-stain-resistant-concentrates-polyester-textiles-avient

https://www.avient.com/sites/default/files/2025-02/Cesa%20Fiber%20Additives%20Stain-resistant%20Product%20Bulletin.pdf

[1] Indicates that this product is formulated without intentionally added per- or poly-fluoroalkyl substances

[2] Spin-dyeing or dope-dyeing is a mass-dyeing technology used for synthetic fibers. It involves coloring the yarn by incorporating the dye into the polymer melt during fiber manufacture.

MICROBAN LAUNCHES A NEW RANGE OF PFAS-FREE WATER REPELLENT TREATMENTS FOR TEXTILES

The Microban H_2O Shield range of products have been designed by Microban to provide water repellent properties to both synthetic and natural textiles (polyester, cotton, nylon and their blends) without the use of PFAS (the composition of the treatment is not known to Ineris).

According to their developer, these products provide excellent water resistance, with tests showing effectiveness maintained for up to 20 domestic washes and results exceeding the industry benchmark of 80+ in the AATCC TM22[3] spray repellency test.

Applications being considered for textiles treated with this hydrophobic technology include outerwear, footwear and technical textiles.

The Microban H_2O Shield range comprises four water repellent products:

- WR1000 designed for low-touch applications such as shower curtains, awnings and tents
- WR1001 optimised for anti-wicking performance[4] on natural fibres in sports textiles, performance jackets and footwear
- WR1002 formulated for fabrics used for hiking gear and gloves
- WR1003 particularly suitable for applications where seam slippage is a concern (such as backpacks and tents)

Microban points out that these products are designed to be easily

integrated into existing textile production lines.

For more information:
https://www.microban.com/coatings/technologies/h2o-shield

[3] This test method is used to measure the water repellency of finishes applied to fabrics.

[4] Textile anti-wicking refers to the property of a fabric or textile treatment that prevents or limits the rise and spread of liquids (such as water or sweat) through the fibres by capillary action.

ADESTOR GLOSS GP PFAS FREE: A PFAS-FREE LABELLING SOLUTION FOR THE FOOD INDUSTRY

Lecta Self-Adhesives has launched PFAS-free self-adhesive products consisting of three layers[5]:

- Adestor Gloss GP PFAS Free paper
- SP123 acrylic adhesive
- A glassine[6] (GA62) or PET (PET23) liner, depending on the type of application required

Adestor Gloss GP PFAS Free paper can replace Adestor Gloss GP, whose PFAS-based chemical treatment provided protection against grease and oil in the previous self-adhesive product.

Lecta Self-Adhesives says these self-adhesive products are designed for labelling food products such as cured meats, cheeses, ready meals and oils.

Adestor Gloss GP PFAS Free is a gloss coated[7] paper (80g/m^2) chemically treated (without PFAS) to resist grease and oil. According to the designer, this product can be used with numerous printing methods, including thermal printing[8].

Lecta Self-Adhesives specifies that SP123 acrylic adhesive is compatible with wood, some cardboard and plastics such as HDPE, PP, PET and PVC[9].

Adhesive paper is supplied in roll form on two different liners:

- GA62 glassine (grammage 62g/m^2) designed for automatic labelling applications and photocell dispensing systems;
- PET23, a transparent, glossy polyester film 23 microns thick, designed for high-speed labelling machines, particularly for the food and beverage industry (wines and spirits) and for cosmetics and household products.

For more information:
https://www.adestor.com/en-US/Pages/Noticia.aspx?Noticia=Adestor-gloss-gp-pfas-free-a-high-grease-resistant-labeling-solution

http://www.adestor.com/fr-FR/Pages/FichaProducto.aspx?compuesto=543

http://www.adestor.com/fr-FR/Pages/FichaProducto.aspx?compuesto=544

[5] The composition of these products is not known to INERIS

[6] Glassine is a paper made from cellulose pulp treated with glycerine, often used as protective or separating paper.

[7] Coated paper is paper that has been surface treated.

[8] Thermal paper printing is a printing technique that uses paper coated with a heat-sensitive ink.

Since 2 January 2020, the use of bisphenol A (BPA) has been banned in thermal paper at a concentration equal to or greater than 0.02% by weight, but it cannot be excluded that other bisphenols (in particular bisphenol S) may be used as thermal developers.

[9] HDPE: High Density Polyethylene; PP: Polypropylene; PET: Polyethylene Terephthalate; PVC: Polyvinyl Chloride.

INNOVATION IN METAL PACKAGING: HENKEL ADHESIVE TECHNOLOGIES INTRODUCES A SUBSTITUTE FOR PHTHALATE-BASED SEALANTS

PVC plastisols used to seal non-food metal packaging often contain phthalates.

As part of a project conducted in collaboration with Emballator, Henkel Adhesive Technologies has launched a new sealant for metal pail and container tops: Darex COV 73.

Darex COV 73 is a PVC plastisol (Phthalates-NI[10]) which, according to its designer, offers high resistance to solvents, ketones and oils, as well as good thermal stability.

Henkel Adhesive Technologies states that seals based on Darex COV 73 are suitable for sealing a range of aqueous and oil based industrial products (excluding food applications).

Darex COV 73 was developed as part of a project conducted in collaboration with Emballator. In 2024, this Swedish manufacturer of metal packaging began converting several of its industrial sites to this new phthalate-free formulation (replacing Henkel's Darex COV 53 PVC plastisol, which contains phthalates). According to Henkel Adhesive Technologies, the application of Darex COV 73 in real operating conditions has demonstrated both the simplicity of the application process (via nozzle) and the effectiveness of the sealing performance achieved.

Henkel Adhesive Technologies adds that the formulation of Darex COV 73 reduces the curing temperature, which lowers energy consumption and reduces the carbon footprint of the application.

For more information:
https://www.henkel.com/press-and-media/press-releases-and-kits/2025-08-21-phthalate-free-sealing-henkel-introduces-new-pvc-based-compounds-for-pail-and-drum-applications-2082886

https://www.gluespec.com/Materials/SpecSheet/7c6de225-e776-4cb7-aac3-09b4a4e410ed

[8] Europe, Middle East & Africa.

[9] SouthEast Asia and the Pacific.

[10] A masterbatch is a granulated material composed of a high concentration of colorant or additive.

[11] In plastics processing, dyne is a measure of force expressing surface tension. It determines the ease with which a liquid (such as ink or paint) adheres to the surface of a material.

[12] Cast extrusion produces stretchable, multilayer films with good tear resistance. Blown" extrusion produces films with enhanced tear resistance for palletizing products with sharp edges.

RECENTLY PUBLISHED ON THE CHEMICALS SUBSTITUTION WEBSITE...

- European Commission adopts regulation on PFOS, its salts and PFOS-related compounds
- Publication of a report on the substitution of PFAS in firefighting foams
- CleanScreen: a new tool for replacing PFAS in the electronics industry
- European restriction on PFAS in firefighting foams is adopted
- Ineris publishes an overview of PFAS uses and documented alternatives

COMMING SOON

PVC Formulation – North America

The international PVC Formulation conference of AMI11 will be held from 11 to 12 February 2026 in Cleveland (USA). The latest technological advances will be presented, particularly for additives such as plasticisers and stabilisers with potential alternatives to phthalates and bisphenols.

Home - PVC Formulation

Future of Surfactants Summite

The next edition of the Future of Surfactants Summit will bring together in Munich (Germany) on 11h and 12th February 2026 manufacturers of surfactants and industrial cleaning products and producers and suppliers of raw material. This meeting will be an opportunity to discuss the latest innovations in the field of surfactants that can replace alkylphenol ethoxylates.

ACI | Future of Surfactants Summit - ACI

EUROCOAT 2026

Eurocoat will bring together suppliers, producers and distributors of coatings (paints, varnishes, printing inks, glues and adhesives) and raw materials in Paris (France) from 24 to 26 March 2026 to discuss the latest innovations to replace bisphenols, alkylphenol ethoxylates and PFAS.

https://www.wplgroup.com/aci/event/european-
https://www.eurocoat-expo.com/en

If you have any questions, please contact us:

https://substitution.ineris.fr/en/contact

https://substitution.ineris.fr/en

French national institute for industrial environment and risks (Ineris)
Parc technologique Alata • BP 2 • F-60550 Verneuil-en-Halatte
+33 3 44 55 66 7 • ineris@ineris.fr • www.ineris.fr