

Deca: The things you need to know



What is the difference between PU and PVC?

PU and PVC are both man-made materials but are based on different polymer chains:

- PU: Polyurethane
- PVC: Polyvinyl chloride

Whilst these names may not mean much to the non-scientific among us, they do mean that the structure of the products is different – PVC has a more rigid, compact make up whereas PU has a more flexible, compliant structure. PVC has a more slippery surface, while PU is grippier and has a more natural feel. PU provides the most realistic imitation of leather with respect to hand, surface feel and overall aesthetics.



What is hydrolysis?

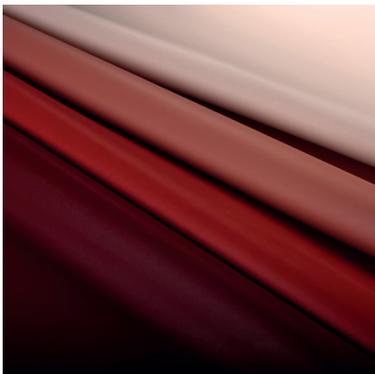
Hydrolysis is any chemical reaction in which the polymer chains rupture in the presence of moisture, causing the surface of the textile to break down. This will manifest itself in cracks and crumbling of the product.

How do you test for hydrolysis resilience?

The test we use is ISO 1419: 1995(E) Method C – popularly known as the 'Tropical Test'. This involves placing the PU fabric in a heat and humidity chamber at 70C and 95% relative humidity to see how it stands up to intense conditions which combine heat and moisture.

Assessed at one-week periods until the product cracks or shows extreme visible changes, this test is one of the most intensive trials a fabric can undergo.

Deca achieves 10-week hydrolysis.



What are phthalates and why are they dangerous?

Deca is phthalate free.

First introduced in the 1920s, phthalates are a family of man-made chemical compounds which are commonly used in the manufacturing of plastics, solvents and cosmetics, and are frequently added to vinyl products to soften and increase their flexibility. As phthalates are not chemically bound to the products they are used in, they continuously leak into both the air and the environment and, as their impact upon human health has not yet been determined, there are a number of concerns around their safety for health.

What is DMF and why is it dangerous?

Deca does not contain DMF.

Dimethylformamide (DMF) is a solvent often used in the production of lower grade polyurethanes. Easily absorbed through the skin, it has been found to cause allergic reactions, liver damage and other adverse health effects.