

EXTRACTION

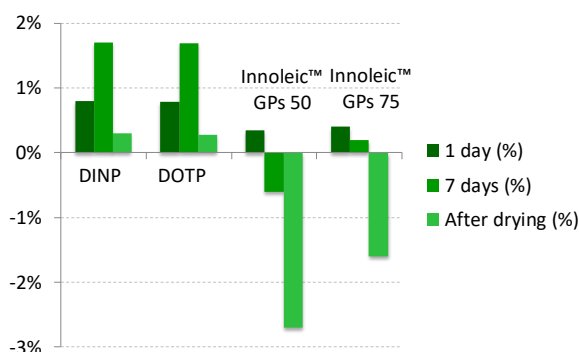
Water and solvent extraction comparative data

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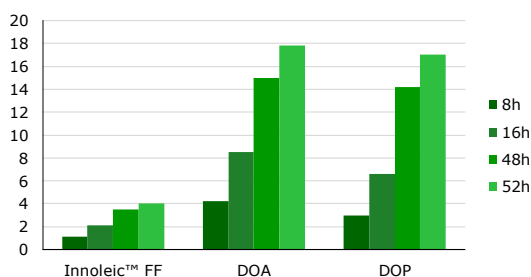
Epoxidized plasticizers, due to their intrinsic higher polarity, present higher water extraction than traditional, petroleum-based materials.

The chart on the right shows the weight change for formulations with different plasticizers, as a % over time. After drying the weight change of the compounds formulated with Innoleic™ products were negative, indicating water extraction.

For applications with constant contact with water, such as swimming pool liners, Innoleic™ products may not achieve the desired minimum specifications. But for outdoors applications, although exposed to rain, the UV protection that the oxirane rings confer to epoxidized plasticizers may compensate for the higher water extraction, resulting in a longer duration material. It is important to evaluate the material for the specific conditions and performance requirements of each application.



Solvent Extraction



On the other hand, the extraction by solvents, such as isoparaffin (C13-C15 isomers), is reduced when compared to petroleum-based materials. The chart on the left shows that effect for Innoleic™ E1 compared to DOP and DOA.

This same effect is also observed for other petroleum-based aliphatic solvents, such as Hexane and LPG.