

## EXUDATION

### Comparative data

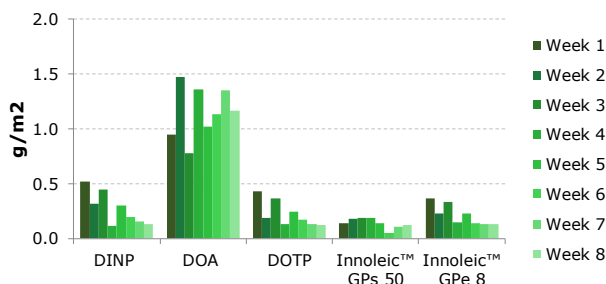
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Exudation is a fundamental concern for flexible PVC formulators. It indicates the compatibility of additives with the PVC resin. Exudation can be defined as the accumulation of additives on the surface of the compound when the rate of migration is greater than the rate of removal at the surface. For epoxy plasticizers, the production process consistency is key to ensure high quality materials that will have the highest compatibility.

The existing test method ASTM D 3291, known as “loop test”, provides a qualitative evaluation of exudation. The chart on the right shows the results for Innoleic™ third generation products in comparison with traditional plasticizers.

Loop Test Observed Exudation	Days		
	1	7	14
DINP	none	none	none
DOTP	none	none	none
Innoleic™ GPs 75	none	none	none
Innoleic™ GPs 50	none	none	none

Exudation - Suspension Resin - 80 phr



Innoleics has developed a novel exudation test method that allows the quantification of exudation over time, with both mass and visual evaluations. The chart on the left shows the results of the mass exudation for this test for various formulations, with equal PHR plasticizer concentrations.

Both the novel exudation method and the loop test indicate that Innoleic™ products present low exudation, better or at par with traditional plasticizers.

reducers in the case of paste PVC applications. There are some viscosity reducers that present incompatibility with Innoleic™ products and may cause severe exudation. Please contact Innoleics technical services for more details.

Special attention needs to be given to viscosity. There are some viscosity reducers that present incompatibility with Innoleic™ products and may cause severe exudation. Please contact Innoleics technical services for more details.