QUALITY ADVANCES.

QUALITY WORKS.

LANXESS
Energizing Chemistry

Extremely low TPP (< 0.1%) Plasticizing Flame Retardant.
Engineered for tomorrow's regulatory requirements.

FUTURE-PROOF YOUR FORMULATIONS

Regulatory pressure on triphenyl phosphate (TPP) is accelerating, turning today's proven flame retardants into tomorrow's compliance risk.

Disflamoll® Advance is LANXESS' next-generation portfolio of phosphorus-based flame retardants, engineered with extremely low TPP content (<0.1%) to help manufacturers stay ahead of evolving global regulations. Designed to preserve the flame retardancy, plasticizing performance, pro- cessing efficiency and supply reliability you rely on, the Disflamoll® Advance portfolio enables a seamless transition to future-ready formulations without compromising performance while supporting the development of more sustainable product concepts.

Disflamoll® Advance OT

Developed for flexible PVC, PVC/NBR and other polymer systems, Disflamoll® Advance OT is an extremely low-TPP (<0.1%) plasticizing flame retardant, based on phosphate ester chemistry. This new product solution supports next generation flame retardant strategies by enabling the replacement of standard plasticizers and reducing or eliminating the need for antimony trioxide (ATO).

Application Areas

Disflamoll® Advance OT is ideal for polar polymer systems requiring excellent flexibility, flame retardancy and superior smoke suppression.

Flexible PVC
- Flooring, films, roofing membranes
- Artificial leather & coated fabrics
- Tarpaulins & awnings

Foams & Blends
- PVC/NBR insulation foams

Non-PVC Systems
- TPU
- Synthetic rubbers (NBR, CR, EPDM)
- Cellulose esters

Disflamoll® Advance

Performance Features & Benefits

Best-in-Class Smoke Performance

- Excellent char formation and combustion inhibition
- Outstanding smoke suppression in PVC and PVC/NBR systems
- Superior smoke performance compared to conventional triaryl phosphate ester flame retardants

Excellent Plasticizing Efficiency

- Strong hardness reduction in PVC systems
- Enables softer compounds and efficient formulations

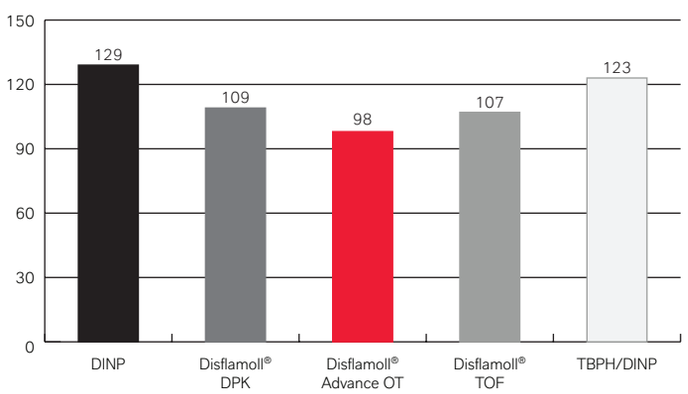
Improved Processability

- Low gelling temperature enables faster fusion
- Reduces energy demand and cycle times

Outdoor Durability

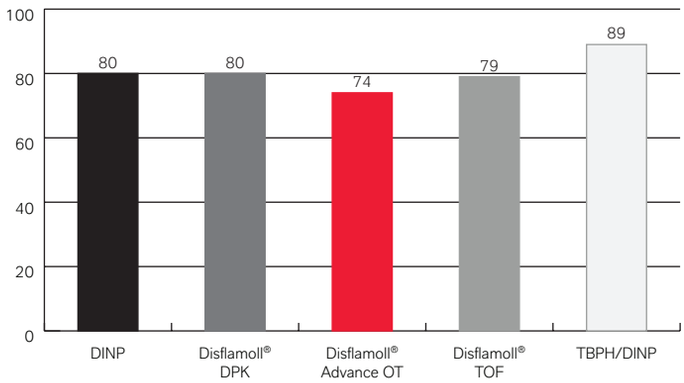
- Outstanding low-temperature flexibility
- Good lightfastness for demanding outdoor applications

Dissolution Temperature (°C, DIN 53408)

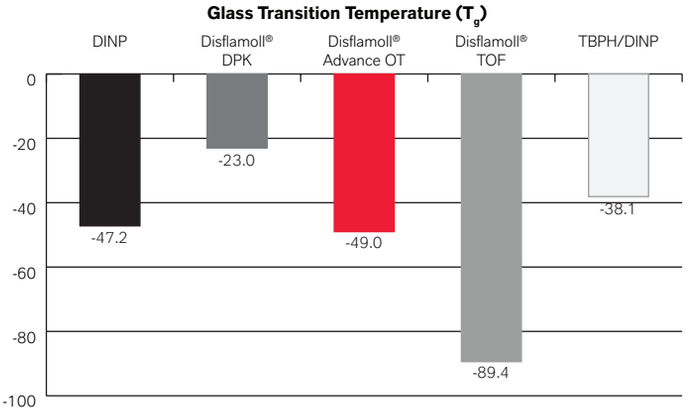


Visit our website to learn more or contact your LANXESS representative to discuss how Disflamoll® Advance OT can support your application.

Shore A Hardness Measurement (ISO 7619-1)



Glass Transition Temperature (T_g)



Smoke Density (ASTM E 662)

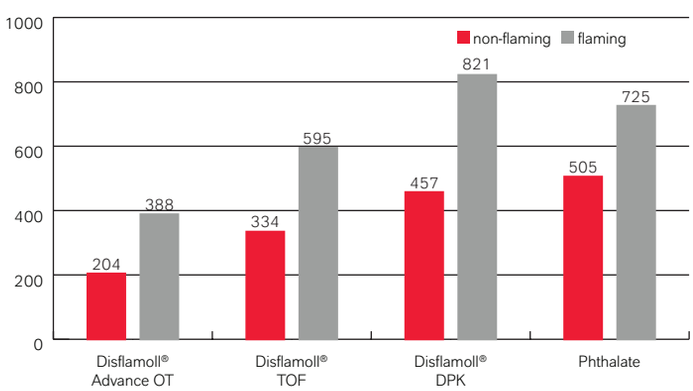


Figure 2, 3 and 4: Plastisol formulation (pbw): 100 pbw PVC, 50 pbw plasticizer, 3 pbw ESBO, 1.5 Ba/Zn stabilizer

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