

QUALITY PROTECTS.

LANXESS Flame Retardants

Product guide

QUALITY WORKS.

LANXESS
Energizing Chemistry

Flame retardants	Chemical description	PVC	PVC-P	PVC-U	Polyurethane	Rigid PUR	Flexible PUR	TPU	Polyolefins	PP	PE	TPO	EPDM	Styrenics	HIPS	ABS	PC/ABS	HIPS/PPE	XPS	EPS	Engineering plastics	PA 6	PA 66	HTPA	PBT	PET	PC	Thermosets	UP	EP	PF	Other	Cellulosics	Synthetic rubber	Textiles	Wood, natural fibers	Highlights																				
Flame retardants – phosphorus-based																																																									
Amgard® CT	Organic phosphonate																																						■	Designed especially for polyester fibers, durable FR treatment																	
Amgard® CU	Organic phosphonate																																						■	Designed especially for polyester fibers, durable FR treatment																	
Disflamoll® 51036	Phosphate ester blend	■						■																																Especially designed for artificial leather																	
Disflamoll® 51092	Butylated triphenyl phosphate	■				■	■	■																																Excellent flame retardance, low odor																	
Disflamoll® DPK	Cresyl diphenyl phosphate	■				■		■																																Excellent flame retardance																	
Disflamoll® DPO	2-Ethylhexyl diphenyl phosphate	■						■																																Excellent plasticizing properties, light-fast																	
Disflamoll® TKP	Tricresyl phosphate	■						■																															Very low PVC-gelling temperature																		
Disflamoll® TKP-P	Tricresyl phosphate	■						■																																Purer version of TKP, especially for non-plastic applications																	
Disflamoll® TOF	Tris-(2-ethylhexyl) phosphate	■											■																										Excellent cold flexibility, alternative to oil-based processing aids																		
Disflamoll® TP	Triphenyl phosphate														■		■	■																					Little plasticizing efficiency, supply form pellets or melt (melting point >48 i/EC)																		
Emerald Innovation® NH-1	Proprietary					■	■	■																															Excellent scorch resistance																		
Levagard® 3000	Oligomeric phosphate ester						■																																Compatible with polyether and polyester polyols																		
Levagard® 3001	Oligomeric phosphate ester composition						■																																Compatible with polyether and polyester polyols																		
Levagard® 4090 N	N,N-hydroxyethylaminoethane phosphonic acid ester					■																																	Reactive product																		
Levagard® DMPP	Dimethylpropane phosphonate					■																																	Very high phosphorus content																		
Levagard® PP	Tris (2-chloroisopropyl) phosphate (TCPP)					■																																	Cl / P-synergism, excellent efficiency																		
Levagard® TEP-Z	Triethyl phosphate					■																																	High phosphorus content, very low viscosity																		
Reofos® 1800	Isopropylated triphenyl phosphate	■				■	■																																Special quality available on request																		
Reofos® 35	Isopropylated triphenyl phosphate	■				■	■	■																															Good low-temperature properties, high plasticizing efficiency, fast gelation																		
Reofos® 50	Isopropylated triphenyl phosphate	■				■	■	■																															High plasticizing efficiency, fast gelation																		
Reofos® 65	Isopropylated triphenyl phosphate	■				■	■	■																															Imparts good electrical and oil resistance																		
Reofos® 95	Isopropylated triphenyl phosphate	■				■	■	■																															Imparts good electrical and oil resistance, low volatility																		
Flame retardants – brominated																																																									
BA-59P	Tetrabromobisphenol A																																								Reactive flame retardant for epoxies																
BC-52	Phenoxy-terminated carbonate oligomer																																								High thermal stability																
BC-58	Tribromophenoxy-terminated carbonate oligomer																																								High bromine content																
Emerald Innovation® 3000 ¹⁾	Brominated styrene butadiene copolymer																																							Polymeric, HBCD replacement for XPS and EPS																	
Firemaster® CP-44HF	Copolymer of dibromostyrene																																							Low molecular weight, polymeric, better flow, higher blister resistance temperature																	
Firemaster® PBS-64HW	Poly (dibromostyrene)																																							Polymeric, higher glass transition temperature than PDBS-80																	
Firemaster® 2100R	Decabromodiphenyl ethane						■			■	■	■	■																										Excellent balance of physical properties, flammability performance and processability																		
PDBS-80	Poly (dibromostyrene)																																							Polymeric, higher thermal stability than PBS-64HW and 44-HF																	
PHT-4®	Tetrabromophthalic anhydride																																							High bromine content, crystall powder, reacts with unsaturated polymer																	
PHT-4® Diol	Tetrabromophthalate diol					■		■																															Reactive, excellent compatibility with a broad range of commercial polyols and blowing agents																		
PHT-4® Diol LV	Tetrabromophthalate diol					■		■																															Low-viscosity version of PHT-4 Diol, improved process handling and storage characteristics																		
PH-73FF	2,4,6-Tribromophenol																																							Intermediate, can be used as a flame retardant for epoxies																	

■ Recommended ■ Suitable ¹⁾ Emerald Innovation® 3000 is based on technology licensed from DuPont.



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Unless specified to the contrary, the values given have been established on standardized test specimens. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that the results refer exclusively to the specimens tested. Under certain conditions, the test results established can be affected to a considerable extent by the processing conditions and manufacturing process.

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