

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® 4090 N	N,N-hydroxyethylaminoethane phosphonic acid ester					■																								■	■								Reactive product	
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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