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 iÆC)
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)					■																							■								CI / 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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