QUALITY PERFORMS.



QUALITY WORKS.



ADDITIVES FOR POLYURETHANES

Product	Chemical description		Rigid foam			Flexible foam		
		Slab	Panels	Spray	Appliance &	Slab-	Slab-	Molde
					pipe insulation	ester	ether	integr
Catalysts								
Addocat® DB	Benzyldimethylamine (BDMA)	•				_		
Addocat® PP	Blend of tertiary amines				•			
Addocat® SO	Tin(II) 2-ethylhexanoate (SO)							
Addocat® 10/9	Aminoalkanol ester							
Addocat® 102	N-Methylimidazole (NMI)							
Addocat® 105	Triethylenediamine (TEDA) in DPG				•			
Addocat® 106	Triethylenediamine (TEDA) in BDO							
Addocat® 108	Bis(2-dimethylaminoethyl)ether (BDMAEE) in DPG							
Addocat® 117	1,4-Dimethylpiperazine (DMP)				•			
Addocat® 118	2,2-Dimorpholinodiethylether (DMDEE)							
Addocat® 201	Dibutyltin dilaurate (DBTDL)				_	_		
Addocat® 726 B	Dimethylcyclohexylamine (DMCHA)						_	_
Addocat® 1221 VN	Blend of tertiary amines in a polyether polyol			_	_			
Addocat® 1656 N	Blend of DBTDL, triethylamine and an emulsifier							
Addocat® 1926	Blend of tertiary amines in a polyether polyol		_		_			
		_	•					_
Addocat® 9727 P	Blend of tertiary amines						•	_
Organic Surfactants								
Addovate® DD 1092	lonic emulsifier							
Addovate® EM	Non-ionic emulsifier							
Addovate® SM optimized	lonic emulsifier							
Addovate® SV	lonic emulsifier							
Addovate® TX	lonic emulsifier							
Addovate® WM	Non-ionic emulsifier							
Addovate® 3240	Non-ionic emulsifier							
	NOTIONIC CHUBINE					_		
Curatives								
Addolink® B	1,4-Butandiol (BDO)							
Addolink® H EP	1,4-Butandiol (BDO) with special retarder							
Addolink® THPE	1,1,1-Tris-(p-hydroxyphenyl)ethane							
Addolink® TT	Dimeric toluene-2,4-diisocyanate							
Addolink® 1604	Isobutyl 4-chloro-3,5-diaminobenzoate (CDABE)							
Addolink® 1701	Diethyltoluenediamine (DETDA)							
Addolink® 1705	Dimethylthiotoluenediamine (DMTDA)							
Addolink® 9823	Blend of chain extenders							
HQEE*	Hydroquinone bis(2-hydroxyethyl)ether (HQEE)							
-	Trydroddinone bio(2 Trydroxycary) carer (TQ22)							
Hydrolysis Stabilizers								
Stabaxol® I	Monomeric carbodiimide							
Stabaxol® L	Monomeric carbodiimide							
Stabaxol® P 200	Polymeric carbodiimide							
Stabaxol® P	Polymeric carbodiimide							
Stabaxol® P 100	Polymeric carbodiimide							
Flame retardants								
			_					
Disflamoll® DPK	Cresyl diphenyl phosphate	_	_					
Disflamoll® DPO	2-Ethylhexyl diphenyl phosphate							
Disflamoll® TOF	Tris(2-ethylhexyl) phosphate							
Disflamoll® 51036	Phosphate ester blend							
Disflamoll® 51092	Butylated triphenyl phosphate							
Emerald Innovation™ NH-1	Proprietary							
Firemaster® 600 / 602	Tetrabromobenzoate ester composition							
Levagard® DMPP	Dimethylpropane phosphonate							
Levagard® PP	Tris(2-chloroisopropyl) phosphate (TCPP)							
Levagard® TEP-Z	Triethyl phosphate							
Levagard® TP LXS 51078	Oligomeric phosphate ester		- 1	_				
Levagard® TP LXS 51114	Phosphorus compound							
Levagard® TP LXS 51114	Oligomeric phosphate ester							
-		_	_	_		_	_	-
Levagard® 4090 N	Phosphonate ester		-	-				
PHT-4-Diol™	Tetrabromophthalate diol			-				
Reofos® 35	Isopropylated triphenyl phosphate		_					
Reofos® 50	Isopropylated triphenyl phosphate		•				•	_
Reofos® 65	Isopropylated triphenyl phosphate							
Reofos® 95	Isopropylated triphenyl phosphate							
Uniplex FRP-45	Bis(2-ethylhexyl) tetrabromophthalate							
Uniplex FRX 44-94	Nitrogen and phosphorus containing blend							
Plasticizers	-							
	Dis/2 sthath and) and							
Adimoll® DO	Bis(2-ethylhexyl) adipate							
Mesamoll® / Mesamoll® II	Alkylsulfonic phenyl ester							
Ultramoll® VII	Adipic acid polyester							
Other PUR additives								
Addovate® BA	Aqueous polyurethane dispersion							
Addovate® LP	Alkali aluminium silicate in castor oil							_
Addovate® Thermostab	Aromatic ester of phosphoric acid				_			
Addovate® 390 Potlife Enhancer II	Polyether modified polysiloxane Organic acid chloride in Mesamoll® II	_	_		_			

^{*} available under several trade names

	Elas	tomers		Coatings	Adhesives	Sealants	Special characteristics
ast	RIM	Cellular	TPU				
				_	_	_	Moderate activity universal gelling co-catalyst, good emulsifier
				- 1	-	- 1	Balanced catalyst, improves flowability, soluble in water
							Standard strong gelling catalyst, essential for flexible foam
					•		Moderate activity gelling catalyst, especially useful for wood coatings
					_		Blowing catalyst, improves adhesion to facings in rigid foam panels Strong multi-purpose gelling catalyst
				•	•	•	Strong gelling catalyst for BDO-cured systems, e. g. footwear
		_					Standard strong blowing catalyst for rigid and flexible foams, improves flowability
							Latent gelling co-catalyst, improves solubility and surface cure
	_		_				Selective blowing catalyst for 1K systems, improves shelf-life
•		•	-	•	_	-	Standard strong multi-purpose gelling catalyst Standard balanced catalyst for rigid foam, applicable to PIR formulations
							Balanced catalyst for rigid foam, applicable to PIR formulations
							Strong balanced catalyst for rigid slabstock foam, applicable to PIR formulations
							Balanced catalyst for rigid foam with improved metering compared to 726 B
							Strong blowing surface-active catalyst for flexible foam
		•					Emulsifier for cellular elastomers (e. g. Vulkollan), extends cream time
		-					Strong emulsifier & dispersant, improves open-cell structure Aqueous emulsifier and foam stabilizer, prevents splits
							Aqueous emulsifier and roam stabilizer, prevents splits Aqueous emulsifier for cellular elastomers
		_					Strong foam stabilizer, promotes fine even cell structure
							Strong emulsifier & dispersant, prevents cell structure defects
							Emulsifier for low-odor foams (urea catalysis), improves open-cell structure
					•	•	Standard chain extender for MDI-based systems
					_		Modified BDO for high hardness applications, extends pot life
					-		Branching agent in PC. Can be used in high temperature PUR adhesives Multifunctional crosslinking agent
						- 1	Long pot life, suitable for large volume articles. Good MBOCA substitute
						-	Short pot life, mainly used for RIM applications
							Medium pot life. Good MBOCA substitute
							Special diamine / diol chain extender blend
					_		Improves heat resistance, compression set & abrasion. Especially apt for TPU
_		_		_	_	_	
			-				Excellent extension of material service life Excellent extension of material service life, liquid
						- 1	Excellent extension of material service life, liquid, water soluble, high thermal stability
							Excellent extension of material service life, solid, high thermal stability
							Excellent extension of material service life, solid, high thermal stability
					•	•	General purpose flame retardant
				•			FDA approval
						•	Excellent low temperature performance
			•	•	_	_	Good low temperature performance
			-	_	•	•	General purpose flame retardant Low scorch
			-	_			Low scorch
							High flame retardant efficiency
					•	•	Standard flame retardant for all types of rigid PUR foam
							Effective viscosity reducer
				•			Low fogging
				_	_	_	Low emissions
				•	_	•	Low emissions Reactive
							Reactive Reactive flame retardant for all types of rigid PUR foam
							General purpose flame retardant
					•	•	General purpose flame retardant
				•	•	•	General purpose flame retardant
				•	_		Low volatility
				_		_	Used in 1K construction adhesives
						_	Low water solubility
					_	_	Non phthalata placticizer with high lightfactages and less terms and the state of the first Tr
					-		Non-phthalate plasticizer with high lightfastness and low-temperature flexibility
					_	_	Non-phthalate plasticizer with high saponification resistance Non-phthalate polymeric plasticizer with high migration & extraction resistance
							. , , ,
							Bonding agent, improves adhesion of rigid integral skin foam to metal
						•	Drying agent for solvent-free polyurethane systems
							Stabilization of TPU, PC/ABS, PA/ABS, ABS & PA vs.thermo-oxidative degradation
							Non-hydrolyzable foam stabilizer for rigid foam with medium to high activity
							Delays the chemical reaction / crosslinking of isocyanates



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