

Product Type	Product Trade Name	Producer/Supplier
Accelerators		
Dithiocarbamates	Accelerator: ZDBC, ZDEC Ekaland™: CDBC, TDEC, ZBEC	Harwick Standard MLPC International
Guanidines	Ekaland: DOTG, DPG	MLPC International
Phenoldisulfides	Vultac®: 2, 3, 5, 710, TB7, TB710	Arkema, Inc.
Thiadiazole	Echo® A	PMC Organometallics
Thiazoles	Kemai: MBT, MBTS	Kemai
Thioureas	Ekaland: DBTU, DETU, DPTU, ETU	MLPC International
Thiurams	Accelerator: MET, TETD, TMTD Ekaland: DPTT, TBzTD, TMTM	Harwick Standard MLPC International
Sulfenamides	Kemai: CBS, DCBS, MBS, TBBS	Kemai
Sulfur Donor	Ekaland: DTDM	MLPC International
Anti-Foams		
Silicone Anti-Foams	AF 9000NE, SAG® 30	Momentive Performance Materials
Antioxidants/Antiozonants		
Alkylated Phenols/BIS-Phenols	Wingstay®: L, SP	OMNOVA Solutions
Diphenylamines	Stangard ODP Wingstay 29A	Harwick Standard OMNOVA Solutions
Mercaptobenzimidazole	Ekaland MMBI	MLPC International
Paraphenylenediamines	Stangard: 6PPD, IPPD	Harwick Standard
Phenolics	Antioxidant 102 Antioxidant 103	Harwick Standard Harwick Standard
Quinolines	Kemai TMQ	Kemai
Specialty Type	Stangard 500	Harwick Standard
Anti-Scorch Agents		
Nitroso Diphenylamine	Ekaland Nitroso HU	MLPC International
Specialty Types	Stangard: CTP	Harwick Standard
Bleaching and Disproportionation Agent		
Para-tertiobutyl phenol disulfide	Rosinox®	MLPC International
Blowing Agents		
Azodicarbonamide	Mikrofine®: ADC: F1, F2, HP-340, L2	HPL Additives Limited
4,4'-Oxybis(benzenesulfonyl hydrazide)	Mikrofine OBSH-M 300	HPL Additives Limited
Bonding Agents		
Hexamethoxymethylmelamine	Resimene®: 3520 Liquid, 3520 PJ-72 Powder, 3520 S-72 Powder	Prefer Melamines
Hexamethylenetetramine	HEXA Free-Flowing (Pulverized)	Hexion Inc.
Casein		
Caseins	Casein: 11, 12, 13	Harwick Standard

Product Type	Product Trade Name	Producer/Supplier
Chemical Dispersions		
Chemical Dispersions	Mastermix® Product Line	Hexpol Compounding - Performance Additives
Coagents		
Coagents	<u>Acrylates:</u> Saret® SR519HP, SR444, CN307, SR351H	Sartomer
	<u>Allylics:</u> SR533, SR507A	Sartomer
	<u>Dimethacrylates:</u> SR-206, SR297, SR297F, SR210 Saret: SR516, SR521	Sartomer
	<u>Methacrylates:</u> SR350, SR350W, SR350S, SR350E, SR350DD, SR350PI, SR350H, SR350T, SR203, SR206G, SR209 Saret: SR500, SR515, SR517, SR517HP	Sartomer
	<u>Specialty Acrylic Esters:</u> SR534D, SR522D	Sartomer
	<u>Dual functional methacrylate:</u> SR523	Sartomer
	<u>Mixture:</u> MCure 300, SR534	
Peroxide Cures	<u>Acrylates:</u> Natro-Cel® 519-A, Saret 521 DLC®-A	Natrochem, Inc.
	<u>Allylics:</u> TAC DLC-A, TAIC DLC-A	Natrochem, Inc.
	<u>Dimethacrylates:</u> SR-206 DLC-A	Natrochem, Inc.
	<u>Methacrylates:</u> Natro-Cel: 35-A; Saret: 500, 515 DLC-A, 517 DLC-A, 517 DLC-A-75	Natrochem, Inc.
	<u>Trimellitates:</u> Natro-Cel TATM-A	Natrochem, Inc.
Coupling Agents		
Liquid Organo Silanes	<u>Aminos:</u> Silquest®: A-1100, A-1120	Momentive Performance Materials
	<u>Epoxy:</u> Silquest A-187	Momentive Performance Materials
	<u>Mercaptos:</u> Silquest: A-189; e-free 189™ Silane	Momentive Performance Materials
	<u>Mercapto (blocked):</u> NXT® Silane	Momentive Performance Materials
	<u>Methacryl:</u> Silquest A-174NT	Momentive Performance Materials
	<u>Vinyls:</u> Silquest: A-151, A-171, A-172, G-170, RC-1	Momentive Performance Materials
Dry Liquid Concentrates	<u>Aminos:</u> A-1100 DLC, A-1120 DLC	Natrochem, Inc.
	<u>Epoxy:</u> A-187 DLC	Natrochem, Inc.
	<u>Methacryl:</u> A-174 DLC	Natrochem, Inc.
	<u>Vinyls:</u> A-172 DLC, Silane 400 DLC	Natrochem, Inc.
	<u>Specials:</u> Silane NX DLC (Modified Mercapto); Silane EF 189 DLC (Ethanol Free A-189) Silane G 170 DLC (Vinyl - HSE Friendly)	Natrochem, Inc. Natrochem, Inc. Natrochem, Inc.
Dry Silane Concentrates	<u>Mercaptos:</u> DSC® 18N	Hexpol Compounding - Performance Additives
	<u>Polysulfides:</u> DSC: 2S, 4S	Hexpol Compounding - Performance Additives
	<u>Vinyl:</u> DSC 74	Hexpol Compounding - Performance Additives
Desiccant		
Calcium Oxide	Desical®, Desical P	Hexpol Compounding - Performance Additives
Dry Liquid Concentrates		
Hard-to Handle Liquids in Free-Flowing Powder Form	Butyl Tuads DLC-A, Calight RPO DLC-A, CI-10 DLC-A, CI-25 DLC-A, CI-50-DLC-A,	Natrochem, Inc.
	DBP DLC-A, DER 331 DLC-A, DHIN DLC-A, DOA DLC-A, DOP DLC-A, DOS DLC-A, Epoxy Resin DLC-A, LP-31 DLC-A,	Natrochem, Inc.
	Natro-Cel: 100N-A, 1312-A, BCA-A, PE-A	Natrochem, Inc.
	Petrolatum DLC-A, Petrolatum T DLC-A, Sunpar 2280 DLC-A,	Natrochem, Inc.
	Tar-Cel®: 14, 20, 30, TEA DLC-A	Natrochem, Inc.

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Product Type	Product Trade Name	Producer/Supplier
Fatty Acids		
Stearic Acid		Harwick Standard
<i>Tallow Based</i>	<u>Heat Stable, High Assay:</u> Stearic Acid F-300 <u>Technical Grades:</u> Stearic Acid: F-1000, F-1500 <u>General Purpose Rubber Grade:</u> Stearic Acid F-2000	
<i>Vegetable Based</i>	<u>General Purpose Rubber Grade:</u> Stearic Acid F-2500	
Fillers		
Carbon Black - <i>Furnace Blacks</i>		Tokai Carbon CB Ltd
	<u>Very High Reinforcing:</u> N110, N134	
	<u>High Reinforcing:</u> N220, N231, N234, N299	Tokai Carbon CB Ltd
	<u>Medium Reinforcing:</u> N326, N330, N339, N347, N351, N358	Tokai Carbon CB Ltd
	<u>Semi-Reinforcing:</u> N550, N650, N660, N762, N772, N774	Tokai Carbon CB Ltd
	<u>Clean Semi-Reinforcing:</u> SR530, SR630, SR699, SR750	Tokai Carbon CB Ltd
	<u>Specialty Grades; Inks, Coating & Plastic:</u> SR155, SR401	Tokai Carbon CB Ltd
	<u>Powder Grades:</u> SR511, SR711	Tokai Carbon CB Ltd
	<u>Conductive:</u> Sidcon 119, 159, 419	Tokai Carbon CB Ltd
Clays - Hard (Air Floated)	Champion® and Natka® 1200	Active Minerals Int'l LLC
Clays - Soft	GK 990, 995, 997	Old Hickory Clay Company
Clays - Hard (Kaolin)	<u>Calcined:</u> GK-IB, GK-IC <u>Surfaced-Modified:</u> GK-KE (vinyl)	Old Hickory Clay Company Old Hickory Clay Company
Coal - Ground	Austin Black® 325	Coal Fillers, Inc.
Fine Cellulose Filler	Solka-Floc®: 20, 40, 40E, 100, 200, 300	J. Rettenmaier USA
Silica - Precipitated, Hydrated, Amorphous	<u>Highly Reinforcing Grades:</u> Hi-Sil®: 134, 134G, 135, 190G, 900, 915, HDP-320G <u>Reinforcing Grades:</u> Hi-Sil: 210, 233, 243 LD <u>Semi-Reinforcing Grades:</u> Hi-Sil 532 EP, Silene™ 732D <u>Highly Dispersible Grades:</u> Hi-Sil EZ: 160, 200 Hi-Sil HDP 320, HDP 320G <u>Chemically Treated Grade:</u> Agilon®: 400D, 454D, 400G-D, 454G-D <u>High Absorbing Grade:</u> Hi-Sil ABS <u>Amorphous Semi-Reinforcing Grade:</u> Silica S	PPG Industries PPG Industries PPG Industries PPG Industries PPG Industries PPG Industries PPG Industries Harwick Standard
Fire Retardants		
Alumina Trihydrate - Ground	Polyfill: 130, 203, 204, 301, 302, 402, 403, 405, 407, 301SM, 403SM Polyjet 502	Cimbar Minerals
Antimony Oxides	Brightsun®: HB, LB	Minxia
Chlorinated Paraffins	Chloroflo® 42 Paroil®: CW: 38AO, 40AO, 50AO, 54NR, 58NR, 140, 152 CPW-100	Dover Chemical Dover Chemical Harwick Standard

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Fire Retardants (continued)

Fire-Resistant Hydraulic Fluid	Fyrquel® 220	ICL-IP Industrial Products
Pentaerythritol	Charmor™ PT40	Perstorp Polyols
Phosphate Ester Plasticizers	<u>Aryls</u> : Lindol™ TCP, Phosflex™: 31L, 41L	ICL-IP Industrial Products
	<u>Alkylated Aryls</u> : Phosflex: 362, 375, 390	ICL-IP Industrial Products
	<u>Alkyl</u> : Phosflex T-BEP	ICL-IP Industrial Products
Zinc Borates	Firebrake®: ZB, ZB Fine, ZB-XF, 500	US Borax

Lubricants

Low Molecular Weight Olefin Waxes	<u>Coating Grades</u> : Epolene® C-10, C-13, C-15, C16*, C-16P*, C-17, C-18*	Westlake Polymers LLC Westlake Polymers LLC
	<u>Emulsifiable Grades</u> : Epolene: E-10**, E-14**, E-14P**, E-16**, E-20**, E-43*, E-43P*	Westlake Polymers LLC Westlake Polymers LLC
	<u>Non-Emulsifiable Grades</u> : Epolene: N-10, N-10P, N-11, N-11P, N-14, N-14P, N-15, N-15P, N-21, N-21P, N-34, N-34P Chemically modified: *=Maleated; **=Oxidized; P = Powder	Westlake Polymers LLC Westlake Polymers LLC Westlake Polymers LLC
Organo Silicone	Silquest PA-826	Momentive Performance Materials
Polyethylene Emulsion	PE-40	Harwick Standard
Silicone Emulsions	<u>Std. Dimethyls</u> : SM-2128 (FDA) NPF (Nonyl Phenol Free), SM 2140 NPF, SM-2162, SM-2163 NPF	Momentive Performance Materials Momentive Performance Materials
	<u>Specialties</u> : SM-2059	Momentive Performance Materials
Silicone Fluids	<u>Alkyl</u> : SF-1147	Momentive Performance Materials
	<u>Phenyl</u> : SF-1154	Momentive Performance Materials
	<u>Specialties</u> : SF 69, SF 18-350 (FDA)	Momentive Performance Materials
	<u>Standard Dimethyls</u> : Element 14 PDMS (5K-100K) Silicone Emulsion 350	Momentive Performance Materials Harwick Standard

Magnesium Oxides

<u>Medium Surface Area Bar</u> : Stan-Mag® Bars	Hexpol Compounding - Performance Additives
<u>Medium Surface Area Bead</u> : Stan-Mag Mini-Beads	"
<u>Combination Zinc Oxide/Magnesium Oxide</u> : Stan-Mag: 1326 HR, MBZ	"
<u>Low Surface Area Powder</u> : Stan-Mag 112	"
<u>Medium Surface Area Powder</u> : Stan-Mag MLW	"
<u>High Surface Area Powders</u> : Stan-Mag: AG, DS2	"

Metallic Stearates

Metallic Stearates	<u>Aluminum</u> : 303, 598 (distearate), 505 (monostearate), 404 (tristearate)	Valtris Specialty Chemicals
	<u>Calcium</u> : 114-36, NF, Wettable (precipitated); 12B, 114-40, 15F (fused)	Valtris Specialty Chemicals Valtris Specialty Chemicals
	<u>Magnesium</u> : 90	Valtris Specialty Chemicals
	<u>Zinc</u> : 8, ACF, D, F Prill, GP, USP, Wettable (fused)	Valtris Specialty Chemicals
	<u>Barium</u>	Valtris Specialty Chemicals
	Potassium, Sodium Stearates	Harwick Standard

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Product Type	Product Trade Name	Producer/Supplier
Multifunctional Additives		
Polyethylene Glycol	<u>Liquids</u> : Enviropeg™: E-200, 300, 400, 600, 1000	Environmental Fluids USA, LLC
	<u>Semi-Solids</u> : Enviropeg: E-1450, 1500, 2000	Environmental Fluids USA, LLC
	<u>Solids</u> : Enviropeg: E-3350, 4000, 6000, 8000, 20000V	Environmental Fluids USA, LLC
Peroxides		
Vulcanizers and Catalysts	<u>Diacyl</u> : Luperox® ANS55, Luperox DI	Arkema, Inc.
	<u>Diacyl</u> : Noviper® DB50	Novichem
	<u>Dialkyls</u> : Di-Cup®: R, 40C, 40KE; Luperox DC40P-SP2;	Arkema, Inc.
	Vul-Cup®: R, 40C, 40C-SP2, 40KE, 40SI;	Arkema, Inc.
	Luperox: 101, 101XL45, EZD-SP2, HP101XLP, RTM	Arkema, Inc.
	Luperox: DHBP	Arkema, Inc.
	<u>Peroxyester</u> : Luperox P	Arkema, Inc.
<u>Peroxyketal</u> : Luperox: 231, 231XL40, 231XL40SP	Arkema, Inc.	
Pigments		
Dry Pigments	MMC: Dry Colors	Hexpol Compounding - Performance Additives
Titanium Dioxide (TiO ₂)	<u>Anatase</u> : Tipaque® A-100	Ishihara Corp (USA)
	<u>Chloride Rutile</u> : Tipaque CR: 50, 50-2, 57, 60-2, 90-2	Ishihara Corp (USA)
	<u>Sulfate Rutile</u> : Tipaque R-980, PF: 736, 737, 742	Ishihara Corp (USA)
	<u>Rutile</u> : Stan-Pig R-400	Harwick Standard
Polymeric Pigment Dispersions	MMC: Masterbatch Colors Binders: EP (EPR), EM (EPDM), FK (FKM), KD (Universal), NR (Natural Rubber), SB (SBR), MQ (Silicone)	Hexpol Compounding - Performance Additives
Inorganic Iron Oxide	Iron Oxides: Red, Black, Brown, Orange, Yellow	SD Chemical
Custom Color & Functional Additive Concentrates/ Masterbatches for the Plastics Industry	PCVC	Prime Colorants
Plasticizers		
Adipates	Polycizer®: DBEEA, DINA, DOA	Harwick Standard
	Merrol®: 4206 (DBEA)	Harwick Standard
Benzoates	Benzoflex® 9-88	Eastman Chemical
Epoxide Soybean Oil	Plas-Chek 775	Valtris Specialty Chemicals
Oleates	Polycizer Butyl Oleate	Harwick Standard
Non-Phthalate	Polycizer DOTP	Harwick Standard
Pentaerythritol Esters	CalEster 600	Calumet Specialty Products Partners, L.P.

Product Type	Product Trade Name	Producer/Supplier
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Plasticizers (continued)

Phosphate Ester Plasticizers	<u>Aryls</u> : Phosflex™: 31L, 41L	ICL-IP Industrial Products
	<u>Alkylated Aryls</u> : Phosflex: 362, 375, 390	ICL-IP Industrial Products
	<u>Alkyl</u> : Phosflex T-BEP	ICL-IP Industrial Products
Phthalates	Polycizer: DBP, DIDP, DINP, DOP, DPHP	Harwick Standard
	Merrol DAP	Harwick Standard
Phthalate Free	Polycizer DHIN	Harwick Standard
Pine Tar Derivatives	Tarene™: 14, 20, 30, 40	Natrochem, Inc.
Polymeric	Admex®: 334F, 523, 760	Eastman Chemical
Polymeric Polyester Adipates	Polycizer P-6400	Harwick Standard
	Merrol P6320, P6420	Harwick Standard
Sebacates	Polycizer: DBS, DOS	Harwick Standard
Specialties	Polycizer MO	Harwick Standard
	Plasticizer SC-E, SC-B	Harwick Standard
Tallates	Natro-Flex IOT	Natrochem, Inc.
	Merrol 818T	Harwick Standard
Trimellitates	Polycizer: TOTM, TOTM-E, TINTM-E	Harwick Standard
	Merrol 810TM-E	Harwick Standard

Polymers/Elastomers

BR

Neodymium High CIS Polybutadiene Synteca®: 44, 63 Synthos S.A.

CPE (Chlorinated Polyethylene)

Thermoset Grades Wellpren™ CM: 566M, 3055M, 3588M, 3678M, 3690M Sundow Polymers Co., Ltd.

Thermoplastic Grades Wellpren™ IM: 500-LC, 888, 898M, 900 Sundow Polymers Co., Ltd.

CR (Polychloroprene)

Mercaptan Modified Grades Baypren®: 110 M36-46, 110 M44-54
210 M39-47
211 M35-43, 230 M92-108, 230 M98-118 Arlanxeo USA Performance Elastomers

XD (xanthogen disulfide) Modified Grades Baypren: 116 M38-48, 126 M63-77,
216 M44-54

XL (pre-crosslinked) Grades Baypren: 114 M52-72, 214 M49-61, 215 M44-56

Sulfur-Modified Grades Baypren: 510 M37-47, 611 M42-54
711 M37-49, 711 M42-54

EPR

Arlanxeo USA Performance Elastomers

<u>Product</u>	<u>Melt Flow Index @ 190°C</u>
Keltan® 1500R	2.55
Keltan 0500RS	6.5
Keltan 0500R	11.0
<u>Product</u>	<u>ML(1+4) @ 100°C</u>
Keltan 3050	51

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Product Type	Product Trade Name	Producer/Supplier
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Polymers/Elastomers (continued)

Product Type	Product Trade Name	Producer/Supplier
<i>EPDM</i>		Arlanxeo USA Performance Elastomers
DCPD Grades	<u>Product</u> Keltan 6160D	<u>ML(1+4) @ 125°C</u> 63
Low ENB Grades	<u>Product</u> Keltan 3250 Keltan 5260Q Keltan 7270Q	<u>ML(1+4) @ 125°C</u> 33 55 72
Medium ENB Grades	<u>Product</u> Keltan 2470E Keltan 2470S Keltan 2650 Keltan 2450 Keltan 2750 Keltan 3973 Keltan 3470 Keltan 4450S Keltan 4465 <i>(contains 50 phr oil)</i> Keltan 4577 <i>(contains 75 phr oil)</i> Keltan 5469C <i>(contains 100 phr oil)</i> Keltan 5470 Keltan 5470C Keltan 5470Q Keltan 6850Q Keltan 6951C <i>(contains 15 phr oil)</i> Keltan 6471 <i>(contains 15 phr oil)</i> Keltan 6950C Keltan 7470Q DE Keltan 7550 Keltan 8550C Keltan 8570C	<u>ML(1+4) @ 125°C</u> 22 25 25 28 28 34 36 42 48 46 52 55 55 57 60 63 65 65 70 70 80 80

Product Type	Product Trade Name	Producer/Supplier
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Polymers/Elastomers (continued)

EPDM (continued)

Arlanxeo USA Performance
Elastomers

Medium ENB Grades (cont)	<u>Product</u>	<u>ML(1+8) @ 150°C</u>
	Keltan 4969Q	30 <i>(contains 100 phr oil)</i>
	Keltan 5465Q	37 <i>(contains 50 phr oil)</i>
	Keltan 5469Q	38 <i>(contains 100 phr oil)</i>
	Keltan 7752C	53 <i>(contains 20 phr oil)</i>
	Keltan 9650Q	60
	Keltan 9565Q	67 <i>(contains 50 phr oil)</i>
High ENB Grades	<u>Product</u>	<u>ML(1+4) @ 125°C</u>
	Keltan 4869C	48 <i>(contains 100 phr oil)</i>
	Keltan 6950C	65
	<u>Product</u>	<u>ML(1+8) @ 150°C</u>
Very High ENB Grades	Keltan 9950C	60
	<u>Product</u>	<u>ML(1+8) @ 100°C</u>
	Keltan 3960Q	54

EVM

Arlanxeo USA Performance
Elastomers

<u>Product</u>	<u>Weight % Vinyl Acetate</u>	<u>Melt Flow Index (g/10 min) @ 190°C</u>
Levamelt® 400	40	3
Levamelt 450	45	3
Levamelt 452	45	10
Levamelt 456	45	25
Levamelt 500	50	2.75
Levamelt 600	60	2.75
Levamelt 650VP	65	4
Levamelt 686	68	25
Levamelt 700	70	4
Levamelt 800	80	4
Levamelt 900	90	4

<u>Product</u>	<u>Vinyl Acetate Content %</u>	<u>ML(1+4) @ 100°C</u>
Levapren® 400	40	20
Levapren 450	45	20
Levapren 500	50	27
Levapren 600	60	27
Levapren 650VP	65	27
Levapren 700	70	27
Levapren 800	80	28
Levapren 900	90	38

Product Type	Product Trade Name	Producer/Supplier		
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Polymers/Elastomers (continued)

NBR (continued)

Arlanxeo USA Performance
Elastomers

	<u>Product</u>	% ACN	
		<u>Content</u>	<u>ML(1+4) @ 100°C</u>
	Perbunan 3945F	39	45
	Perbunan 3965F	39	65
	Perbunan 3976VP	40	65
	Krynac 4450F	43.5	50
	Perbunan 4456F	44	55
	Krynac 4955VP	48.5	55
	Krynac 4975F	48.5	75
Precrosslinked grades	Krynac XL 3355VP	33	55
	Krynac XL 3375VP	33	75

XNBR (carboxylated)

Arlanxeo USA Performance
Elastomers

<u>Product</u>	% ACN	
	<u>Content</u>	<u>ML(1+4) @ 100°C</u>
Krynac X 740	26.5	38
Krynac X 750	27	47
Krynac X 146	32.5	45
Krynac X 160	32.5	58

NBR Powder

Arlanxeo USA Performance
Elastomers

<u>Product</u>	% ACN	
	<u>Content</u>	<u>ML(1+4) @ 100°C</u>
Baymod® N34.52	33	45
Baymod N33.53VP	33	53
Baymod N34.82	33	70
Baymod N33114	33	110

XNBR (carboxylated) Powder

Arlanxeo USA Performance
Elastomers

<u>Product</u>	% ACN	
	<u>Content</u>	<u>ML(1+4) @ 100°C</u>
Baymod N XL 33.61VP	33	55
Baymod N XL 33.64VP	33	55
Baymod N XL 38.43	38	115

HNBR (hydrogenated)

Arlanxeo USA Performance
Elastomers

Fully saturated grades	<u>Product</u>	% ACN		Residual
		<u>Content</u>	<u>ML(1+4) @ 100°C</u>	<u>Double Bond Content (%)</u>
	Therban® 3406	34.0	63	0.9 max
	Therban 3407	34.0	70	0.9 max
	Therban 3907	39.0	70	0.9 max
	Therban 4307	43.0	63	0.9 max
	Therban 4309	43.0	100	0.9 max

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Polymers/Elastomers (continued)
HNBR (hydrogenated) (continued)

 Arlanxeo USA Performance
 Elastomers

	Product	% ACN Content	ML(1+4) @ 100°C	Residual Double Bond Content (%)
Partially saturated grades	Therban 3446	34.0	61	4.0
	Therban 3467	34.0	68	5.5
	Therban 3496	34.0	55	18.0
	Therban 3627	36.0	66	2.0
	Therban 3629	36.0	87	2.0
	Therban 3668VP	36.0	80	6.0
	Therban 4367	43.0	61	5.5
	Therban 4369	43.0	97	5.5
Low Temperature grades	Therban LT1707VP	17.0	74	0.9 max
	Therban LT2007	21.0	74	0.9 max
	Therban LT2057	21.0	67	5.5
	Therban LT2157	21.0	70	5.5
	Therban LT2568VP	25.0	80	5.0
Low Mooney - Advanced Technology grades	Therban AT LT 2004VP	21.0	39	0.9 max
	Therban AT 3404	34.0	39	0.9 max
	Therban AT 3443VP	34.0	39	4.0
	Therban AT 3904VP	39.0	39	0.9 max
	Therban AT 4364VP	43.0	39	5.5
Carboxylated grades	Therban XT VPKA 8889	33.0	77	3.5
Acrylate Reinforced Technology grades	Therban ART 3462	34.0	22	5.5

FKM

DAI-EL	Fluorine	ML(1+10)	
Product	Content	@ 121°C	Comments

Raw Gum-Copolymers

G-310LBP	66	23	Base for G-EXP-008 & 021	Daikin America
G-310MBP	66	36	Base for G-EXP-002	Daikin America
G-310HBP	66	47	Base for G-384 & EXP-004	Daikin America
G-7200BP	66	24	Base for G-7251	Daikin America
G-7210BP	66	28	Base for G-7261 & 7262	Daikin America
G-7400BP	66	46	Base for G-7451 & 7452	Daikin America
G-7800BP	66	86	Base for G-7801	Daikin America
G-704BP	66	30	Base for G-704	Daikin America
G-701BP	66	41	Base for G-701 & 702	Daikin America
G-7320BP	66	38	Base for G-7329	Daikin America

Polymers/Elastomers (continued)

<i>FKM (continued)</i>	<u>Product</u>	<u>Fluorine Content</u>	<u>ML(1+10) @ 121°C</u>	<u>Comments</u>	
<i>Incorporated Cure (Bisphenol)-Copolymers</i>	G-384	66	42		Daikin America
	G-EXP-004	66	42		Daikin America
	G-EXP-002	66	33		Daikin America
	G-EXP-021	66	22		Daikin America
	G-EXP-008	66	20		Daikin America
	G-7251	66	20		Daikin America
	G-7261	66	22		Daikin America
	G-7451	66	40		Daikin America
	G-704	66	30		Daikin America
	G-702	66	41		Daikin America
	G-101	500 Poise @ 60°C 3000 mol wt - Non-curing liquid			Daikin America
<i>Raw Gum-Terpolymers</i>	G-603BP	70.5	27	Base for G-603	Daikin America
	G-621BP	71	53	Base for G-621	Daikin America
	G-684BP	70	44	Base for G-EXP-045	Daikin America
	G-501N	69	48	Base for G-551	Daikin America
	G-556BP	69	36	Base for G-558	Daikin America
	G-607BP	66	43	Base for G-671	Daikin America
	G-633BP	66	27	Base for G-EXP-025	Daikin America
<i>Incorporated Cure (Bisphenol)-Terpolymers</i>	G-603	71	31		Daikin America
	G-621	71	50		Daikin America
	G-EXP-045	70	40		Daikin America
	G-551	69	48		Daikin America
	G-558	69	34		Daikin America
	G-671	66	35		Daikin America
	G-EXP-025	66	23		Daikin America
<i>Diamine Cureable</i>	G-501 NK	68	74		Daikin America
<i>Peroxide Curable Copolymers</i>	G-801	66	37		Daikin America
	G-802	66	20		Daikin America
	G-8002	66	25		Daikin America
<i>Peroxide Curable Terpolymers</i>	G-901	71	48		Daikin America
	G-902	71	19		Daikin America
	G-952	69	40		Daikin America
	G-912	71	56		Daikin America
	G-9062	71	23		Daikin America
	G-9074	71	42		Daikin America
<i>Low Temperature Terpolymers</i>	LT-302	65	44		Daikin America
	LT-304	65	26		Daikin America
	LT-252	66	35		Daikin America

web: www.harwick.com phone: 330-798-9300

Product Type	Product Trade Name		Producer/Supplier
Polymers/Elastomers (continued)			
<i>FKM (continued)</i>	DAI-EL	Fluorine ML(1+10)	
	<u>Product</u>	<u>Content</u>	<u>@ 121°C</u>
<i>Base Resistant</i>	GBR-6005	62	60
	GBR-6002	62	25
<i>Perfluoroelastomers</i>		<u>ML(1+10) @ 100°C</u>	
	GA-15		25
	GA-105		65
	GA-500		80
<i>NR (Natural Rubber)</i>			
Natural Rubber	<u>Visually Graded Rubber Sheet:</u> 1RSS, 3RSS		Harwick Standard
	<u>Technically Specified:</u> SIR, SMR, SVR		Harwick Standard
<i>SBR (Emulsion Polymerized)</i>			
Non Oil-Extended	Krallex®: 1500, 1502		Synthos S.A.
Oil-Extended	Krallex: 1723, 1783		Synthos S.A.
High Styrene Resin Masterbatch	KER 1904		Synthos S.A.
Process Oils			
Aromatic	Stan-Flux LV-1		Harwick Standard
Paraffinics	Stan-Lube: 10, 60, 60P, 80		Harwick Standard
Naphthenics	Stan-Plas: 100/105, 150, 300, 1200, 2000		Harwick Standard
Naphthenic (FDA)	Stan-Plas 101C (178.3620 Part C)		Harwick Standard
White Oils (Tech Grade)	Renoil 500T		Renkert Oil
White Oils (Food Grade)	Renoil 90W, 350W		Renkert Oil
PVC/Thermoplastics Additives			
Acrylic Impact Modifiers	Paraloid™: KM-330, KM-334 KM-100XPRO, KM-5000 EXL-3330, EXL-3361		Dow Plastics Additives
Acrylic Process Aids	Paraloid: K-120ND, K-125, K-130D, K-175, K-400, K-416, K-445 Surecel™ 467		Dow Plastics Additives Dow Plastics Additives
Antistats	Pelestat Line: 201, 230, VH230, 300, 1251, NC6321, NC7530 Pelectron Line: AS, HS, PVH, PVL, UC		Sanam Corporation
Paraffin Wax	Stan-Wax 165		Harwick Standard

Product Type	Product Trade Name	Producer/Supplier
PVC Additives (continued)		
MBS Impact Modifiers	Paraloid: BTA-730, BTA-751U, EXL-2650J, 2691J, 3691J	Dow Plastics Additives
Lubricants - Bisamide Wax	Advawax™ 280 Kemamide®: EBS, W-40	PMC Biogenix PMC Biogenix
Lubricants - Vinyl	Advalube™: B-3310, B-3314, B-4540, E-2100, F-1005, F-1020	PMC Biogenix
Lubricants - Vinyl -I pack systems	Advapak™: S-1100, S-1203	PMC Biogenix
Specialty Additives - Gloss Control	Paraloid KF-710, EXL-5136	Dow Plastics Additives
Stabilizers (Tin) for Rigid	<u>Low Tin <15%:</u> Advastab™: TM-694, TM-3412 Thermolite®: 140, 176 <u>High Tin >15%:</u> Advastab: TM-181FS, TM404ER, TM-900F Thermolite: 12, 31, 31S, 108, 380, 890	PMC Organometallix PMC Organometallix
Reodorants		
Fragrances used in Rubber and Plastics	Stan-Mask: Baby Powder, Bubblegum, Cinnamon, Citrus, Floral, Peach, Sweet Strawberry, Vanilla, Wintergreen	Harwick Standard
Resins		
Polyterpenes	Piccolyte®: S Series	Pinova Inc.
Rosin Resins	Hercolyn® D Staybelite®: Ester 10	Pinova Inc. Pinova Inc.
Dark Hydrocarbon	Resinex® 100F	Harwick Standard
Coumarone Indenes	Natrorez®: 10, 25, 50D	Natrochem, Inc.
High Styrenes	Pliolite®: S6B, S6S	OMNOVA Solutions
Rubber Chemical Dispersions		
Oil-Treated Powders	Redimix® Line	Hexpol Compounding - Performance Additives
Polymeric Bound	Mixland®+, Mixland NG	MLPC International
Polymeric Modified	PolyBound® Line	Hexpol Compounding - Performance Additives
Prewieghts	Accu-Way® prepackaged chemicals	Hexpol Compounding - Performance Additives
Rubber to Substrate Bonding Agents		
One Coat - Solvent Based	Cilbond®: 10E, 24, 36, 48, 49SF, 89ET	H.B. Fuller
One Coat - Water Based	Cilbond 62W	H.B. Fuller
Primer/Top Coat	Cilbond 12E (primer), Cilbond 80ET (top coat)	H.B. Fuller
Diluent	Cilbond 4000	H.B. Fuller
Bonding Additive	Cilcure® B	H.B. Fuller

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Product Type	Product Trade Name	Producer/Supplier
Sulfur		
Rubbers, Conditioned, and/or Treated	<u>Untreated:</u> 104, 338(superfine), 340(fine)	Harwick Standard
	<u>Oil Treated:</u> 167(1%), 209(0.5%)	Harwick Standard
	<u>Conditioned:</u> 296(fine grind, oil treated & mag carbonate), 793(superfine-mag carbonate)	Harwick Standard
Insoluble Sulfur	IS-HS-7020	Precision Measurement Int'l
Vulcanized Vegetable Oils		
Vulcanized Vegetable Oils	VVO®: Brown, White, Neophax	Hexpol Compounding - Performance Additives
Zinc Oxide		
Treated and Untreated	<u>Untreated - Low Surface Area:</u> CR-3	G.H. Chemicals
Zinc Oxide	<u>Untreated - Medium Surface Area:</u> CR-4	G.H. Chemicals
	<u>Untreated - Medium/High Surface Area-High Reactivity:</u> CR-41	G.H. Chemicals
	<u>Untreated - Medium Surface Area-USP:</u> CR-4-USP-2	G.H. Chemicals
	<u>Untreated - Medium Surface Area-Granulated:</u> CR-4G	G.H. Chemicals
	<u>Untreated - High Surface Area:</u> CR-42	G.H. Chemicals
	<u>Treated - Low Surface Area:</u> CR-30	G.H. Chemicals
	<u>Treated - Medium Surface Area:</u> CR-40	G.H. Chemicals
	<u>Treated - Medium/High Surface Area-High Reactivity:</u> CR-410	G.H. Chemicals
	<u>Treated - High Surface Area:</u> CR-420	G.H. Chemicals