

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

Product Type	Product Trade Name	Producer/Supplier
Accelerators		
Dithiocarbamates	Accelerator: ZDBC, ZDEC	Harwick Standard
	Ekaland™: CDBC, TDEC, ZBEC	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	Harwick Standard
	Ekaland: DPTT, TBzTD, TMTM	MLPC International
Sulfenamides	Kemai: CBS, DCBS, MBS, TBBS	Kemai
Sulfur Donor	Ekaland: DTDM	MLPC International
Anti-Foams		
Silicone Anti-Foams	AF 9000NE	Momentive Performance Materials
Antioxidants/Antiozonants		
Alkylated Phenols/BIS-Phenols	Wingstay®: L, SP	OMNOVA Solutions
Diphenylamines	Stangard ODP	Harwick Standard
	Wingstay 29A	OMNOVA Solutions
Paraphenylenediamines	Stangard: 6PPD, IPPD	Harwick Standard
Phenolics	Antioxidant 102, 103	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	Preferre Melamines
Hexamethylenetetramine	HEXA Free-Flowing (Pulverized)	Hexion VAD LLC

Product Type	Product Trade Name	Producer/Supplier
Casein		
Caseins	Casein: 11, 12, 13	Harwick Standard
Chemical Dispersions		
Chemical Dispersions	Mastermix® Product Line	Hexpol Compounding - Performance Additives
Cleaner		
Disinfectant	Foster 40-80 First Defense®	HB Fuller
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> : Co-519 DLC®-A, Co-521 DLC-A	Natrochem, Inc.
	<u>Allylics</u> : TAC DLC-A, TAIC DLC-A	Natrochem, Inc.
	<u>Dimethacrylates</u> : Co-206 DLC-A	Natrochem, Inc.
	<u>Methacrylates</u> : Co-: 350 DLC-A, 500 DLC-A, 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



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Dry Liquid Concentrates		
Hard-to Handle Liquids in Free-Flowing Powder Form	TBTDS DLC-A, Natro-Cel 150N-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, Natro-Cel 2280P-A,	Natrochem, Inc.
	Tar-Cel®: 14, 20, 30, TEA DLC-A	Natrochem, Inc.
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	Old Hickory Clay Company
Clays - Hard (Kaolin)	<u>Calcined:</u> GK-IB	Old Hickory Clay Company
	<u>Surfaced-Modified:</u> GK-KE (vinyl)	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	PPG Industries
	<u>Reinforcing Grades:</u> Hi-Sil: 210, 233, 243 LD	PPG Industries
	<u>Semi-Reinforcing Grades:</u> Hi-Sil 532 EP, Silene™ 732D	PPG Industries
	<u>Highly Dispersible Grades:</u> Hi-Sil EZ: 160, 200	PPG Industries
	Hi-Sil HDP 320, HDP 320G	
	<u>Chemically Treated Grade:</u> Agilon®: 400D, 454D, 400G-D, 454G-D	PPG Industries
	<u>High Absorbing Grade:</u> Hi-Sil ABS	PPG Industries
	<u>Amorphous Semi-Reinforcing Grade:</u> Silica S	Harwick Standard

Product Type	Product Trade Name	Producer/Supplier
Fire Retardants		
Antimony Oxides	Brightsun®: HB, LB	Minxia
Chlorinated Paraffins	Chloroflo® X42, 42	Dover Chemical
	Paroil®: CW: 38AO, 40AO, 50AO, 54NR, 58NR, 152, X140, 140	Dover Chemical
	CPW-100	Harwick Standard
Fire-Resistant Hydraulic Fluid	Fyrquel® 220	ICL-IP Industrial Products
Pentaerythritol	Charmor™ PT40	Perstorp Polyols
Phosphate Ester Plasticizers	<u>Aryls</u> : Lindol™ TCP, Phosflex™ 71B	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
	<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	Westlake Polymers LLC Westlake Polymers LLC Westlake Polymers LLC
	Chemically modified: *=Maleated; **=Oxidized; P = Powder	
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)	Momentive Performance Materials
	Silicone Emulsion 350	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	"

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Product Type	Product Trade Name	Producer/Supplier
Metallic Stearates		
Metallic Stearates	<u>Aluminum:</u> 303, 598 (distearate), 505 (monostearate), <u>Calcium:</u> 114-36, Wettable (precipitated); 12B, 114-40, 15F (fused) <u>Lithium:</u> Lithium Stearate Veg <u>Magnesium:</u> 90 <u>Zinc:</u> 8, ACF, D, DLG-10A, DLG-20A, F Prill, GP, S-1200, USP, Wettable (fused), XF-100 <u>Barium</u> Potassium, Sodium Stearates	Valtris Specialty Chemicals Valtris Specialty Chemicals Valtris Specialty Chemicals Valtris Specialty Chemicals Valtris Specialty Chemicals Valtris Specialty Chemicals Valtris Specialty Chemicals Harwick Standard
Multifunctional Additives		
Polyethylene Glycol	<u>Liquids:</u> Enviropeg™: E-200, 300, 400, 600, 1000 <u>Semi-Solids:</u> Enviropeg: E-1450, 1500, 2000 <u>Solids:</u> Enviropeg: E-3350, 4000, 6000, 8000, 20000V	Environmental Fluids USA, LLC Environmental Fluids USA, LLC Environmental Fluids USA, LLC
Peroxides		
Vulcanizers and Catalysts	<u>Diacyl:</u> Luperox® ANS55, Luperox DI <u>Diacyl:</u> Noviper® DB50 <u>Dialkyls:</u> Di-Cup®: R, 40C, 40KE; Luperox DC40P-SP2; Vul-Cup®: R, 40C, 40KE, 40SI; Luperox: 101, 101XL45, EZD-SP2, F40P-SP2, HP101XLP, RTM, DHBP <u>Peroxyester:</u> Luperox P <u>Peroxyketal:</u> Luperox: 231, 231XL40, 231XL40SP	Arkema, Inc. Novichem Arkema, Inc. Arkema, Inc. Arkema, Inc. Arkema, Inc. Arkema, Inc.
Pigments		
Dry Pigments	MMC: Dry Colors	Hexpol Compounding - Performance Additives
Titanium Dioxide (TiO ₂)	<u>Anatase:</u> Tipaque® A-100 <u>Chloride Rutile:</u> Tipaque CR: 50, 50-2, 57, 60-2, 90-2 <u>Sulfate Rutile:</u> Tipaque R-980, PF: 736, 737, 742 <u>Rutile:</u> Stan-Pig R-400	Ishihara Corp (USA) Ishihara Corp (USA) Ishihara Corp (USA) 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

Product Type	Product Trade Name	Producer/Supplier
Plasticizers		
Adipates	Polycizer®: DBEEA, DOA	Harwick Standard
	Merrol®: 4206 (DBEA)	Harwick Standard
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.
Phosphate Ester Plasticizers	<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 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.
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Liquid Butyl Rubber

	Viscosity (cps @ 66°C)	Avg Molecular Weight	Glass Transition Temp	
Kalene® 800	800,000	36,000	-70C	HB Fuller
Kalene 1300	1,300,000	42,000	-70C	HB Fuller

Pre-Crosslinked

Butyl Pellets

	Mooney Viscosity (ML1+3 @ 127°C)	Glass Transition Temp	Degree of X-Linking	
Kalar® 5215	47-57	-70C	Moderate	HB Fuller
Kalar 5246	30-40	-70C	Low	HB Fuller
Kalar 5263	55-65	-70C	Moderate	HB Fuller
Kalar 5275	65-72	-70C	High	HB Fuller
Kalar 5277	68-75	-70C	Very High	HB Fuller
Kalar 5280	80-90	-70C	Very High	HB Fuller

Liquid Polyisoprene

	Viscosity (cps @ 66°C)	Avg Molecular Weight	Glass Transition Temp	
Isolene® 40-S	40,000	32,000	-65C	HB Fuller
Isolene 400-S	400,000	65,000	-65C	HB Fuller

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

CPE (Chlorinated Polyethylene)

Thermoset Grades	Wellpren™ CM: 566, 674, 566M, 3055M, 3065M, 3080M, 3588M, 3595M, 3678M, 3678MH, 3690M, 4080M, 3550N, 3565N, 3595NC, 3575TL	Sundow Polymers Co., Ltd.
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Thermoplastic Grades	Wellpren™ IM: 500-LC, 888, 898M, 900	Sundow Polymers Co., Ltd.
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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
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XD (xanthogen disulfide) Modified Grades	Baypren: 116 M38-48, 126 M63-77, 216 M44-54	
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XL (pre-crosslinked) Grades	Baypren: 114 M52-72, 214 M49-61, 215 M44-56	
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Sulfur-Modified Grades	Baypren: 510 M37-47, 611 M42-54 711 M37-49, 711 M42-54	
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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

EPDM Arlanxeo USA Performance Elastomers

DCPD Grades	<u>Product</u> Keltan 6160D	<u>ML(1+4) @ 125°C</u> 63
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Low ENB Grades	<u>Product</u> Keltan 3250	<u>ML(1+4) @ 125°C</u> 33
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Polymers/Elastomers (continued)

EPDM (continued)

Arlanxeo USA Performance
Elastomers

Medium ENB Grades

<u>Product</u>	<u>ML(1+4) @ 125°C</u>
Keltan 2470E	22
Keltan 2470S	25
Keltan 2650	25
Keltan 2450	28
Keltan 2750	28
Keltan 3973	34
Keltan 3470	36
Keltan 4450S	42
Keltan 4465	48
	<i>(contains 50 phr oil)</i>
Keltan 4577	46
	<i>(contains 75 phr oil)</i>
Keltan 5469C	52
	<i>(contains 100 phr oil)</i>
Keltan 5470	55
Keltan 5470C	55
Keltan 6951C	63
	<i>(contains 15 phr oil)</i>
Keltan 6471	65
	<i>(contains 15 phr oil)</i>
Keltan 6950C	65
Keltan 7550	70
Keltan 8550C	80
Keltan 8570C	80

<u>Product</u>	<u>ML(1+8) @ 150°C</u>
Keltan 7752C	53
	<i>(contains 20 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>
Keltan 9950C	60

Very High ENB Grades

<u>Product</u>	<u>ML(1+8) @ 150°C</u>
Keltan 13561C	92

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Product Type Product Trade Name Producer/Supplier
Polymers/Elastomers (continued)
EVM Arlanxeo USA Performance

<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

Precrosslinked grades	Levapren 500 XL VP	50	55
	Levapren 600 XL VP	60	55
	Levapren 700 XL VP	70	60
	Levapren 800 XL VP	80	55

High Performance Precrosslinked grades	Levapren 500 PXL VP	50	60
	Levapren 600 PXL VP	60	60
	Levapren 700 PXL VP	70	60
	Levapren 800 PXL VP	80	60

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

NBR

Arlanxeo USA Performance
Elastomers

	% ACN	
<u>Product</u>	<u>Content</u>	<u>ML(1+4) @ 100°C</u>
Perbunan® 1846F	18	45
Krynac® M3340F	22	33
	<i>(contains 52 phr Mesamoll®)</i>	
Perbunan 2255VP	22	55
Krynac 2645F	26	45
Krynac 2850F	27.5	48
Perbunan 2845F	28	45
Krynac 2865F	28	65
Perbunan 2870F	28	70
Perbunan 2831F	28.6	30
Perbunan 2846F	28.6	42
Krynac 3330F	33	30
Krynac 3345F	33	45
Krynac 3370F	33	70
Krynac 33110F	33	110
Perbunan 3430F	34	32
Perbunan 3445F	34	45
Perbunan 3470F	34	70
Perbunan 3481F	34.7	78
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

	% ACN	
<u>Product</u>	<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

	% ACN	
<u>Product</u>	<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

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Polymers/Elastomers (continued)
XNBR (carboxylated) Powder

Arlanxeo USA Performance

	% ACN	
<u>Product</u>	<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

		% ACN	ML(1+4) @ 100°C	Residual Double Bond Content (%)
Fully saturated grades	<u>Product</u>	<u>Content</u>	<u>@ 100°C</u>	<u>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
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

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

<i>FKM</i>	GFL	Fluorine	ML(1+10)	<u>Comments</u>	
	<u>Product</u>	<u>Content</u>	<u>@ 121°C</u>		
Raw Gum-Copolymers	KR 220	66	22	General Purpose	Gujarat Fluorochemicals LTD
	KR 235	66	28	General Purpose-Injection	Gujarat Fluorochemicals LTD
	KR 250	66	46	General Purpose-Injection	Gujarat Fluorochemicals LTD
Incorporated Cure					
(Bisphenol)-Copolymers	KB 2250Z	66	23	Injection Molding-Metal	Gujarat Fluorochemicals LTD
	KB 2252	66	23	Injection Molding-Complex	Gujarat Fluorochemicals LTD
	KB 2253	66	23	Injection Molding-O-Rings,	Gujarat Fluorochemicals LTD
	KB 2255	66	23	Injection Molding-Improved C-	Gujarat Fluorochemicals LTD
	KB 2400Z	66	40	Molding of Metal Bonded Parts	Gujarat Fluorochemicals LTD
	KB 2402	66	40	Injection Molding-Complex	Gujarat Fluorochemicals LTD
	KB 2403	66	23	Injection Molding-O-Rings,	Gujarat Fluorochemicals LTD
	KB 2652	66	65	Compression Molding-Seals	Gujarat Fluorochemicals LTD
Bisphenol/Diamine Curable	KR 325	68.0	25	Low Viscosity-General	Gujarat Fluorochemicals LTD
Raw Gum Terpolymers	KR 370	68.0	70	High Viscosity-General	Gujarat Fluorochemicals LTD
	KR 435	68.5	30	Medium Viscosity-General	Gujarat Fluorochemicals LTD
	KR 470	68.5	65	High Viscosity-General	Gujarat Fluorochemicals LTD
Incorporated Cure					
(Bisphenol)-Terpolymers	KB 3300Z	68.0	30	Injection Molding-Metal	Gujarat Fluorochemicals LTD
	KB 4303	68.5	30	Injection Molding-Gaskets	Gujarat Fluorochemicals LTD
	KB 4602	68.5	60	Comp. Molding-Complex	Gujarat Fluorochemicals LTD
	KB 4603	68.5	60	Compression Molding-Gaskets	Gujarat Fluorochemicals LTD
Peroxide Curable					
Terpolymers	KR 320P	67	20	Injection Molding-General	Gujarat Fluorochemicals LTD
	KR 340P	67	45	Compression Molding	Gujarat Fluorochemicals LTD
	KR 520P	70.4	20	Inj. Molding-Chemical	Gujarat Fluorochemicals LTD
	KR 545P	70.4	45	Molding-Chemical Resistance	Gujarat Fluorochemicals LTD
	KR 565P	70.4	65	Comp. Mold-Chemical	Gujarat Fluorochemicals LTD
	KR 525LP	70.4	25	Exrusion-Multilayer Hoses	Gujarat Fluorochemicals LTD
Low Temperature					
Bisphenol Curable	KR 630	65.8	30	Injection Molding-General	Gujarat Fluorochemical LTD
	KB 6253	65.8	25	Molding of O-rings	Gujarat Fluorochemical LTD
NR (Natural Rubber)					
Natural Rubber	<u>Visually Graded Rubber Sheet:</u> 1RSS				Harwick Standard
	<u>Technically Specified:</u> SMR, SVR				Harwick Standard
PTFE Micropowders					
Inolub	<u>Product</u>	<u>Particle</u>			
	T201F	<u>Size (µm)</u>	6		Gujarat Fluorochemicals LTD
SBR (Emulsion Polymerized)					
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.

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

Product Type	Product Trade Name	Producer/Supplier
Process Oils		
Aromatic	Stan-Flux LV-1	Harwick Standard
Paraffinics	Stan-Lube: 10, 60, 60P, 80	Harwick Standard
Naphthenics	Stan-Plas: 100/105, 150, 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
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 -	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	Natrez®: 10, 25, 50D	Natrochem, Inc.
High Styrenes	Pliolite®: S6B	OMNOVA Solutions

Product Type	Product Trade Name	Producer/Supplier
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
Preweighs	Accu-Way® prepackaged chemicals	Hexpol Compounding - Performance Additives
Rubber Process Aids		
Fatty Acid Soap	Fluxtec: M, 32, 120	Proquitec, S.A.
Homogenizing Agent	Homogetec: ME, MTC	Proquitec, S.A.
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
Sulfur		
Rubbermakers, Conditioned, and/or Treated	<u>Untreated:</u> 104, 338(superfine), 340(fine) <u>Oil Treated:</u> 167(1%), 209(0.5%) <u>Conditioned:</u> 296(fine grind, oil treated & mag carbonate), 793(superfine-mag carbonate)	Harwick Standard Harwick Standard Harwick Standard Harwick Standard
Vulcanized Vegetable Oils		
Vulcanized Vegetable Oils	VVO®: Brown, White, Neophax	Hexpol Compounding -
Zinc Oxide		
Treated and Untreated Zinc Oxide	<u>Untreated - Low Surface Area:</u> CR-3 <u>Untreated - Medium Surface Area:</u> CR-4 <u>Untreated - Medium/High Surface Area-High Reactivity:</u> CR-41 <u>Untreated - Medium Surface Area-USP:</u> CR-4-USP-2 <u>Untreated - Medium Surface Area-Granulated:</u> CR-4G <u>Untreated - High Surface Area:</u> CR-42 <u>Treated - Low Surface Area:</u> CR-30 <u>Treated - Medium Surface Area:</u> CR-40 <u>Treated - Medium/High Surface Area-High Reactivity:</u> CR-410 <u>Treated - High Surface Area:</u> CR-420	EverZinc EverZinc EverZinc EverZinc EverZinc EverZinc EverZinc EverZinc EverZinc EverZinc

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mcb 08/2021