



web: www.harwick.com

phone: 330-798-9300

Product Type	Product Trade Name	Producer/Supplier
Accelerators		
Dithiocarbamates	Accelerator: ZDBC, ZDEC Ekaland™: CDBC, TDEC, ZBEC	Harwick Standard MLPC International
Phenoldisulfides	Vultac®: 2, 3, 5, 710, TB7, TB710	Arkema, Inc.
Thiadiazole	Echo® A	PMC Organometallix
Thioureas	Ekaland: DBTU, DETU, DPTU, ETU	MLPC International
Thiurams	Accelerator: MET Ekaland: DPTT, TBzTD, TMTM	Harwick Standard MLPC International
Sulfenamides	Kemai DCBS	Kemai
Anti-Foams		
Silicone Anti-Foams	AF 9000NE	Momentive Performance Materials
Antioxidants/Antiozonants		
Alkylated Phenols/BIS-Phenols	Wingstay®: L, SP	OMNOVA Solutions
Diphenylamines	Wingstay 29A	OMNOVA Solutions
Phenolics	Antioxidant 102, 103	Harwick Standard
Quinolines	Kemai TMQ	Kemai
Specialty Type	Stangard 500-A	Harwick Standard
Anti-Scorch Agents		
Nitroso Diphenylamine	Ekaland Nitroso HU	MLPC International
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	Prefere Melamines
Hexamethylenetetramine	HEXA Free-Flowing (Pulverized)	Bakelite Select
Casein		
Caseins	Casein: 11, 12, 13	Harwick Standard
Chemical Dispersions		
Chemical Dispersions	Stan-Mix™ Line	Harwick Standard
Cleaner		
Disinfectant	Foster 40-80 First Defense®	HB Fuller

Product Type	Product Trade Name	Producer/Supplier
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, 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. 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, 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 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, Tar-Cel®: 14, 20, 30, TEA DLC-A	Natrochem, Inc. 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	

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Product Type	Product Trade Name	Producer/Supplier
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> SR201, 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> SC119, SC159, SC419	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
Fire Retardants		
Antimony Oxides	Brightsun®: HB, LB	Minxia
Chlorinated Paraffins	Chloroflo® 42	Ravago
	Paroil®: CW: 38AO, 40AO, 50AO, 54NR, 58NR, 152, 140	Ravago
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

Product Type	Product Trade Name	Producer/Supplier
Lubricants		
Low Molecular Weight Olefin Waxes	<u>Coating Grades:</u> Epolene® C-10, C-13, C-15, C16*, C-16P*, C-17, C-18* <u>Emulsifiable Grades:</u> Epolene: E-10**, E-14**, E-14P**, E-16**, E-20**, E-43*, E-43P* <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 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-2140 NPF (Nonyl Phenol Free),	Momentive Performance Materials
Silicone Fluids	<u>Alkyl:</u> SF-1147 <u>Phenyl:</u> SF-1154 <u>Specialties:</u> SF 69 Silicone Emulsion 350	Momentive Performance Materials Momentive Performance Materials Momentive Performance Materials Harwick Standard
Metallic Stearates		
Metallic Stearates	<u>Aluminum:</u> 303, 598 (distearate), 505 (monostearate), <u>Calcium:</u> 114-36, Wettable (precipitated); 12B, 114-40, 15F (fused) Lithium: 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 <u>Diacyl:</u> Noviper® DB50 <u>Dialkyls:</u> Di-Cup®: R, 40C, 40KE; Luperox DC40P-SP2; Vul-Cup®: R, 40C, 40KE; Luperox: 101, 101XL45, EZD-SP2, F40P-SP2, HP101XLP, RTM, DHBP <u>Peroxyketal:</u> Luperox: 231, 231XL40, 231XL40SP	Arkema, Inc. Novichem Arkema, Inc. Arkema, Inc. Arkema, Inc. Arkema, Inc.
Pigments		
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	Ishihara Corp (USA) Ishihara Corp (USA) Ishihara Corp (USA)
Inorganic Iron Oxide	Iron Oxides: Red, Black, Brown, Orange, Yellow	SD Chemical

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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, F, J, N, T, TS	Calumet Specialty Products
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
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

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

Liquid Polyisoprene

	Viscosity (cps @ 66°C)	Avg Molecular Weight	Glass Transition Temp	
Isolene® 40-S	40,000	32,0000	-65C	HB Fuller
Isolene 400-S	400,000	65,0000	-65C	HB Fuller

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
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

<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

Arlanxeo USA Performance
Elastomers

EPDM

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

Arlanxeo USA Performance
Elastomers

(contains 50 phr oil)



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General Products Listing

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Product Type Product Trade Name Producer/Supplier

Polymers/Elastomers (continued)

EPDM (continued)

Arlanxeo USA Performance
Elastomers

Medium ENB Grades (continued)	<u>Product</u>	<u>ML(1+4) @ 125°C</u>
	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

EVM

Arlanxeo USA Performance
Elastomers

<u>Product</u>	Weight <u>% Vinyl Acetate</u>	Melt Flow Index <u>(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

Polymers/Elastomers (continued)

EPDM (continued)

EVM continued)

Arlanxeo USA Performance
Elastomers

	Product	Vinyl Acetate Content %	ML(1+4) @ 100°C
	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	Levapren 500 PXL VP	50	60
Precrosslinked grades	Levapren 600 PXL VP	60	60
	Levapren 700 PXL VP	70	60
	Levapren 800 PXL VP	80	60

NBR

Arlanxeo USA Performance
Elastomers

Product	% ACN Content	ML(1+4) @ 100°C
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

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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>
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

Product Type	Product Trade Name	Producer/Supplier
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HNBR (hydrogenated) (continued)

Arlanxeo USA Performance Elastomers

Partially saturated grades	Product	Product	% ACN	ML(1+4)	Residual
			Content	@ 100°C	Double Bond Content (%)
	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

GFL	Fluorine	ML(1+10)	
Product	Content	@ 121°C	Comments

Raw Gum-Copolymers

KR 220	66	22	General Purpose	Gujarat Fluorochemicals LTD
KR 235	66	28	General Purpose-Injection Molding	Gujarat Fluorochemicals LTD
KR 250	66	46	General Purpose-Injection Molding	Gujarat Fluorochemicals LTD

Incorporated Cure (Bisphenol)-Copolymers

KB 2250Z	66	23	Injection Molding-Metal Bonding	Gujarat Fluorochemicals LTD
KB 2252	66	23	Injection Molding-Complex Shapes	Gujarat Fluorochemicals LTD
KB 2253	66	23	Injection Molding-O-Rings, Seals	Gujarat Fluorochemicals LTD
KB 2255	66	23	Injection Molding-Improved C-Set	Gujarat Fluorochemicals LTD
KB 2400Z	66	40	Molding of Metal Bonded Parts	Gujarat Fluorochemicals LTD
KB 2402	66	40	Injection Molding-Complex Shapes	Gujarat Fluorochemicals LTD
KB 2403	66	23	Injection Molding-O-Rings, Seals	Gujarat Fluorochemicals LTD
KB 2652	66	65	Compression Molding-Seals	Gujarat Fluorochemicals LTD

Bisphenol/Diamine Curable Raw Gum Terpolymers

KR 325	68.0	25	Low Viscosity-General Purpose	Gujarat Fluorochemicals LTD
KR 370	68.0	70	High Viscosity-General Purpose	Gujarat Fluorochemicals LTD
KR 435	68.5	30	Medium Viscosity-General Purpose	Gujarat Fluorochemicals LTD
KR 470	68.5	65	High Viscosity-General Purpose	Gujarat Fluorochemicals LTD

Incorporated Cure (Bisphenol)-Terpolymers

KB 3300Z	68.0	30	Injection Molding-Metal Bonding	Gujarat Fluorochemicals LTD
KB 4303	68.5	30	Injection Molding-Gaskets	Gujarat Fluorochemicals LTD
KB 4602	68.5	60	Comp. Molding-Complex Shapes	Gujarat Fluorochemicals LTD
KB 4603	68.5	60	Compression Molding-Gaskets	Gujarat Fluorochemicals LTD

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Product Type	Product Trade Name			Producer/Supplier
Polymers/Elastomers (continued)				
FKM (continued)	GFL	Fluorine	ML(1+10)	
	<u>Product</u>	<u>Content</u>	<u>@ 121°C</u>	<u>Comments</u>
Peroxide Curable				
Terpolymers				
	KR 320P	67	20	Injection Molding-General Purpose
	KR 340P	67	45	Compression Molding
	KR 520P	70.4	20	Inj. Molding-Chemical Resistance
	KR 545P	70.4	45	Molding-Chemical Resistance
	KR 565P	70.4	65	Comp. Mold-Chemical Resistance
	KR 525LP	70.4	25	Exrusion-Multilayer Hoses
Low Temperature				
Bisphenol Curable				
	KR 630	65.8	30	Injection Molding-General Purpose
	KB 6253	65.8	25	Molding of O-rings
NR (Natural Rubber)				
Natural Rubber	<u>Visually Graded Rubber Sheet: 1RSS</u>			Harwick Standard
	<u>Technically Specified: SMR, SVR</u>			Harwick Standard
PTFE Micropowders				
		Particle		
	<u>Product</u>	<u>Size (µm)</u>		
Inolub	T201F	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.
SSBR (Solution-Styrene Butadiene Rubber)				
Specialty Dry Grade	Syntion® 1810 S-SBR			Synthos S.A.
Process Oils				
Aromatic	Stan-Flux LV-1			Harwick Standard
Paraffinics	Stan-Lube: 10, 60, 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

Product Type	Product Trade Name	Producer/Supplier
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PVC/Thermoplastics Additives (continued)

Acrylic Process Aids	Paraloid: K-120ND, K-125, K-130D, K-175, K-400, K-416, K-445	Dow Plastics Additives
	Surecel™ 467	Dow Plastics Additives
Antistats	Pelestat Line: 201, 230, VH230, 300, 1251, NC6321, NC7530	Sanam Corporation
	Pelectron Line: AS, HS, PVH, PVL, UC	
MBS Impact Modifiers	Paraloid: BTA-730, BTA-751U, EXL-2650J, 2691J, 3691J	Dow Plastics Additives
Lubricants - Bisamide Wax	Advawax™ 280	PMC Biogenix
	Kemamide®: EBS, W-40	PMC Biogenix
Lubricants - Vinyl	Advalube™: B-3310, B-3314, B-4540, E-2100, F-1005, F-1020	PMC Biogenix
Lubricants - Vinyl -1 pack systems	Advapak™: S-1100, S-1203	PMC Biogenix
Specialty Additives	TempRite®: 674X571, 677X670	Lubrizol Advanced Materials
Specialty Additives - Vinyl 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	PMC Organometallix
	<u>High Tin >15%:</u> Advastab: TM-181FS, TM404ER, TM-900F Thermolite: 12, 31, 31S, 108, 380, 890	PMC Organometallix

Reodorants

Fragrances used in Rubber and Plastics	Stan-Mask: Baby Powder, Bubblegum, Cinnamon, Citrus, Floral, Peach, Sweet Strawberry, Vanilla, Wintergreen	Harwick Standard
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Resins

Polyterpenes	Piccolyte®: S Series	Pinova Inc.
Rosin Resins	Hercolyn® D	Pinova Inc.
	Staybelite®: Ester 10	Pinova Inc.
Dark Hydrocarbon	Resinex® 100F	Harwick Standard
Coumarone Indenes	Natrorez®: 10, 25, 50D	Natrochem, Inc.
High Styrenes	Pliolite®: S6B	OMNOVA Solutions

Rubber Chemical Dispersions

Polymeric Bound	Mixland®+, Mixland NG	MLPC International
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Rubber Process Aids

Fatty Acid Soap	Fluxtec: M, 32, 120	Proquitech, S.A.
Homogenizing Agent	Homogetec: ME, MTC	Proquitech, 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



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Product Type	Product Trade Name	Producer/Supplier
Sulfur		
Rubbermakers, 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 Harwick Standard
Zinc Oxide		
Treated and Untreated	<u>Untreated - Low Surface Area:</u> CR-3	EverZinc
Zinc Oxide	<u>Untreated - Medium Surface Area:</u> CR-4	EverZinc
	<u>Untreated - Medium/High Surface Area-High Reactivity:</u> CR-41	EverZinc
	<u>Untreated - Medium Surface Area-USP:</u> CR-4-USP-2	EverZinc
	<u>Untreated - Medium Surface Area-Granulated:</u> CR-4G	EverZinc
	<u>Untreated - High Surface Area:</u> CR-42	EverZinc
	<u>Treated - Low Surface Area:</u> CR-30	EverZinc
	<u>Treated - Medium Surface Area:</u> CR-40	EverZinc
	<u>Treated - Medium/High Surface Area-High Reactivity:</u> CR-410	EverZinc
	<u>Treated - High Surface Area:</u> CR-420	EverZinc