

**HARWICK**
S T A N D A R D

ISO 9001-2015 REGISTERED

General Products Listing

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
Phenoldisulfides	Vultac®: 2, 3, 5, 710, TB7, TB710	Arkema, Inc.
Thiadiazole	Echo® A	PMC Organometallix
Thioureas	Ekaland: DBTU, DETU, DPTU, ETU	MLPC International
Thiurams	Ekaland: DPTT, TBzTD, TMTM	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	Synthomer USA
Diphenylamines	Wingstay 29A	Synthomer USA
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	Prefere Melamines
Hexamethylenetetramine	HEXA Free-Flowing (Pulverized)	Bakelite Select
Casein		
Caseins	Casein: 11, 12, 13	Harwick Standard
Chemical & Paste Dispersions		
Chemical & Paste Dispersions	Stan-Mix™ Line	Harwick Standard

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	Sartomer
	Saret: SR516, SR521	
	<u>Methacrylates</u> : SR350, SR350W, SR350S, SR350E, SR350DD, SR350PI, SR350T, SR203, SR206G, SR209	Sartomer
	Saret: SR500, SR515, SR517, SR517HP	
	<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);	Natrochem, Inc.
	Silane EF 189 DLC (Ethanol Free A-189) Silane G 170 DLC (Vinyl - HSE Friendly)	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,	Natrochem, Inc.
	Tar-Cel®: 14, 20, 30, TEA DLC-A	Natrochem, Inc.
Fatty Acids		
Stearic Acid		Harwick Standard
Tallow Based	<u>Technical Grades</u> : Stearic Acid: F-1000, F-1500	
	<u>General Purpose Rubber Grade</u> : Stearic Acid F-2000	
Vegetable Based	<u>General Purpose Rubber Grade</u> : Stearic Acid F-2500	



HARWICK

STANDARD

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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	CFI Carbon Products
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*	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-11, N-11P, N-14, N-14P, N-15, N-15P, N-21P, N-34, N-34P	Westlake Polymers LLC Westlake Polymers LLC Westlake Polymers LLC
	Chemically modified: *=Maleated; **=Oxidized; P = Powder	
Polyethylene Emulsion	PE-40; Stan-Wax™ HT-MR	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	Momentive Performance Materials Momentive Performance Materials Momentive Performance Materials
	Silicone Emulsion 350	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
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, 101SIL45, 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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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.
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.
Thermoplastic Grades	Wellpren™ IM: 500-LC, 888, 898M, 900	Sundow Polymers Co., Ltd.
CR (Polychloroprene)		Arlanxeo USA Performance Elastomers

Product Type	Product Trade Name	Producer/Supplier																				
Polymers/Elastomers (continued)																						
CR (Polychloroprene)		Arlanxeo USA Performance Elastomers																				
Mercaptan Modified Grades	Baypren®: 110 M36-46, 110 M44-54 210 M39-47 211 M35-43, 230 M92-108, 230 M98-118																					
XD (xanthogen disulfside) 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																				
	<table><tr><td><u>Product</u></td><td><u>Melt Flow Index @ 190°C</u></td></tr><tr><td>Keltan® 1500R</td><td>2.55</td></tr><tr><td>Keltan 0500RS</td><td>6.5</td></tr><tr><td>Keltan 0500R</td><td>11.0</td></tr><tr><td><u>Product</u></td><td><u>ML(1+4) @ 100°C</u></td></tr><tr><td>Keltan 3050</td><td>51</td></tr></table>	<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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<u>Product</u>	<u>ML(1+4) @ 100°C</u>																					
Keltan 3050	51																					
EPDM		Arlanxeo USA Performance Elastomers																				
DCPD Grades	<table><tr><td><u>Product</u></td><td><u>ML(1+4) @ 125°C</u></td></tr><tr><td>Keltan 6160D</td><td>63</td></tr></table>	<u>Product</u>	<u>ML(1+4) @ 125°C</u>	Keltan 6160D	63																	
<u>Product</u>	<u>ML(1+4) @ 125°C</u>																					
Keltan 6160D	63																					
Low ENB Grades	<table><tr><td><u>Product</u></td><td><u>ML(1+4) @ 125°C</u></td></tr><tr><td>Keltan 3250</td><td>33</td></tr></table>	<u>Product</u>	<u>ML(1+4) @ 125°C</u>	Keltan 3250	33																	
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Medium ENB Grades	<table><tr><td><u>Product</u></td><td><u>ML(1+4) @ 125°C</u></td></tr><tr><td>Keltan 2470E</td><td>22</td></tr><tr><td>Keltan 2470S</td><td>25</td></tr><tr><td>Keltan 2650</td><td>25</td></tr><tr><td>Keltan 2450</td><td>28</td></tr><tr><td>Keltan 2750</td><td>28</td></tr><tr><td>Keltan 3973</td><td>34</td></tr><tr><td>Keltan 3470</td><td>36</td></tr><tr><td>Keltan 4450S</td><td>42</td></tr><tr><td>Keltan 4465</td><td>48</td></tr></table>	<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	
<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																					
(contains 50 phr oil)																						



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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
		(contains 75 phr oil)
	Keltan 5469C	52
		(contains 100 phr oil)
	Keltan 5470	55
	Keltan 5470C	55
	Keltan 6951C	63
		(contains 15 phr oil)
	Keltan 6471	65
		(contains 15 phr oil)
	Keltan 6950C	65
	Keltan 8550C	80
	Keltan 8570C	80
	<u>Product</u>	<u>ML(1+8) @ 150°C</u>
	Keltan 7752C	53
		(contains 20 phr oil)
High ENB Grades	<u>Product</u>	<u>ML(1+4) @ 125°C</u>
	Keltan 4869C	48
		(contains 100 phr oil)
	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>	<u>Weight</u> <u>% Vinyl Acetate</u>	<u>Melt Flow Index</u> <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 900	90	4

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

EPDM (continued)

EVM continued)

Arlanxeo USA Performance
Elastomers

		Vinyl Acetate	
	Product	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

	% ACN	
Product	Content	ML(1+4) @ 100°C
Perbunan® 1846F	18	45
Krynac® M3340F	22	33
		(contains 52 phr Mesamoll®)
Perbunan 2255	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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Polymers/Elastomers (continued)

NBR (continued)

Arlanxeo USA Performance
Elastomers

	<u>Product</u>	<u>% ACN Content</u>	<u>ML(1+4) @ 100°C</u>
Precrosslinked grades	Krynac XL 3355	33	55
	Krynac XL 3375	33	75

XNBR (carboxylated)

Arlanxeo USA Performance
Elastomers

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

XNBR (carboxylated) Powder

Arlanxeo USA Performance
Elastomers

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

HNBR (hydrogenated)

Arlanxeo USA Performance
Elastomers

	<u>Product</u>	<u>% ACN Content</u>	<u>ML(1+4) @ 100°C</u>	<u>Residual Double Bond Content (%)</u>
Fully saturated grades	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	3446	% 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	3668	36.0	80	6.0
	Therban	4367	43.0	61	5.5
	Therban	4369	43.0	97	5.5
Low Temperature grades	Therban	LT1707	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	LT2568	25.0	80	5.0
Low Mooney - Advanced Technology grades	Therban	AT LT 2004	21.0	39	0.9 max
	Therban	AT 3404	34.0	39	0.9 max
	Therban	AT 3443	34.0	39	4.0
	Therban	AT 3904	39.0	39	0.9 max
	Therban	AT 4364	43.0	39	5.5
Carboxylated grades	Therban	XT VP	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



web: www.harwick.com

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Product Type	Product Trade Name				Producer/Supplier
Polymers/Elastomers (continued)					
FKM (continued)	GFL	Fluorine	ML(1+10)		
	Product	Content	@ 121°C	Comments	
Peroxide Curable					
Terpolymers	KR 320P	67	20	Injection Molding-General Purpose	Gujarat Fluorochemicals LTD
	KR 340P	67	45	Compression Molding	Gujarat Fluorochemicals LTD
	KR 520P	70.4	20	Inj. Molding-Chemical Resistance	Gujarat Fluorochemicals LTD
	KR 545P	70.4	45	Molding-Chemical Resistance	Gujarat Fluorochemicals LTD
	KR 565P	70.4	65	Comp. Mold-Chemical Resistance	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 Purpose	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		Particle			
	Product	Size (µm)			
Inolub	T201F	6		Gujarat Fluorochemicals LTD	
SBR (Emulsion Polmerized)					
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				Dow Plastics Additives
	KM-100XPRO, KM-5000				
	EXL-3330, EXL-3361				

Product Type	Product Trade Name	Producer/Supplier
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
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
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
Resins		
Dark Hydrocarbon	Resinex® 100F	Harwick Standard
Coumarone Indenes	Natrorez®: 10, 25, 50D	Natrochem, Inc.
High Styrenes	Pliolite®: S6B, S6H	Synthomer USA
DCPD Thermal Resins	LX®: 238, 782, 1035, 1055, 1082, 1200, 2600-105	Neville Chemical
C9 Aromatic Resins	Nevchem®: 100, 300	Neville Chemical
	Nevpene®: 9500	Neville Chemical
	Cumar®: 105, 130	Neville Chemical
C9 Aromatic Resins Liquid	Cumar®: P-10, P-25, R-16-A-70%, R-29-10	Neville Chemical
	NP: 10, 25	Neville Chemical
C5 Aliphatic Resins	Nevtac®: 20, 100	Neville Chemical
Rosin Esters	Nevester®: 100	Neville Chemical
Rubber Chemical Dispersions		
Polymeric Bound	Mixland®+, Mixland NG	MLPC International
Sulfur		
Rubbermakers, Conditioned, and/or Oil Treated	<u>Untreated:</u> 104, 338(superfine), 340(fine)	Harwick Standard
Treated	<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
Vulcanized Vegetable Oils		
Factice	Stan-Fact™: Brown, Light Brown, Golden Yellow	Harwick Standard
Zinc Oxide		
Treated Zinc Oxide	<u>Medium Surface Area:</u> AZO66T; Zinc Oxide 210S	EverZinc
Untreated Zinc Oxide	<u>Low Surface Area:</u> AZO66L	EverZinc
	<u>Medium Surface Area:</u> AZO66; Zinc Oxide 210	EverZinc
	<u>Medium Surface Area USP:</u> AZO66USP	EverZinc