



General Products Listing

web: www.harwickstandard.com

phone: 330-798-9300

Product Type	Product Trade Name	Producer/Supplier
Accelerators		
Dithiocarbamates	Accelerator: TDEC, ZDBC, ZDEC, ZDMC, ZEBC Ekaland™: CDBC, NDBC, TDEC	Harwick Standard, Kemai China MLPC International
Guanidines	Ekaland: DOTG, DPG	MLPC International
Paradinitrosobenzenes	Ekaland: PPDN 30 DX, PPDN 50 HU; Rosinox®	MLPC International MLPC International
Phenoldisulfides	Vultac®: 2, 3, 5, 710, TB7, TB710	Arkema, Inc.
Thiadiazole	Echo® A	PMC Organometallics
Thiazoles	Accelerator: MBD, MBT, MBTS, ZMBT	Harwick Standard, Kemai China
Thioureas	Ekaland: DBTU, DETU, DPTU, ETU	MLPC International
Thiurams	Accelerator: MET, TETD, TiBTD, TMTD Ekaland: DPTT, TBzTD, TMTM	Harwick Standard, Kemai China MLPC International
Sulfenamides	Accelerator: CBS, DCBS, MBS, TBBS	Harwick Standard, Kemai China
Sulfur Donor	Ekaland: DTDM	MLPC International
Anti-Foams		
Silicone Anti-Foams	AF 9000NE, SAG® 30	Momentive Performance Materials
Antioxidants/Antiozonants		
Alkylated Phenols/BIS-Phenols	Stangard® PC Wingstay®: L, S, SP	Harwick Standard OMNOVA Solutions
Clarifying Agents	HICLEAR® 301	HPL Additives Limited
Diphenylamines	Stangard ODP Wingstay 29, Wingstay 29A	Harwick Standard OMNOVA Solutions
Heat Stabilizer	PMI 1035	Precision Measurement Int'l
Hindered Amine Light Stabilizer	PMI 662, 770, 944	Precision Measurement Int'l
Mercaptobenzimidazole	Ekaland MMBI	MLPC International
Metal Deactivators	Kinox® 24	HPL Additives Limited
Optical Brighteners	HITEX® OB, OB-1	HPL Additives Limited
Paraphenylenediamines	Stangard: 6PPD, DTPD, IPPD	Harwick Standard, Kemai China
Phenolics	Kinox: 10, 30, 34, 76, 98 Wanox TBM6, PMI 1135, PMI 1520 Ethanox® 4702 IONOL 103	HPL Additives Limited Precision Measurement Int'l SI Group PMC Specialties Group
Phosphite	Kinox 68 PMI 626	HPL Additives Limited Precision Measurement Int'l

Product Type	Product Trade Name	Producer/Supplier
Antioxidants/Antiozonants (continued)		
Quinolines	Stangard: TMQ, TMQ-E, TMQ Powder	Harwick Standard, Kemai China
UV Absorber	PMI UV326, UV327	Precision Measurement Int'l
Specialty Type	Stangard 500 ZMTI	Harwick Standard Harwick Standard, Kemai China
Anti-Scorch Agents		
Nitroso Diphenylamine	Ekaland Nitroso HU	MLPC International
Specialty Types	Stangard: CTP	Harwick Standard
Blowing Agents		
Azodicarbonamide	Mikrofine®: ADC: 21, 65, F1, F2, H2, H760, H780, L2, VR, Z25	HPL Additives Limited
4,4'-Oxybis(benzenesulfonyl hydrazide)	Mikrofine OBSH, OBSH-M 300	HPL Additives Limited
Bonding Agents		
Hexamethoxymethylmelamine	Resimene®: 3520 Liquid, 3520 S-65 Powder, 3520 S-72 Powder	INEOS Melamines
Hexamethylenetetramine	HEXA Free-Flowing (Pulverized)	Hexion Inc.
Casein		
Caseins	Casein: 11, 12, 13	Harwick Standard
Chemical Dispersions		
Chemical Dispersions	Mastermix® Product Line	Hexpol Compounding - Specialty Products
Co-Curing Agents		
Peroxide Cures	<u>Acrylates</u> : Natro-Cel® 519-A, Saret 521 DLC®-A <u>Allylics</u> : TAC DLC-A, TAIC DLC-A <u>Dimethacrylates</u> : SR-206 DLC-A <u>Methacrylates</u> : Natro-Cel: 35-A; Saret: 500, 515 DLC-A, 517 DLC-A, 517 DLC-A-75 <u>Trimellitates</u> : Natro-Cel TATM-A	Natrochem, Inc. Natrochem, Inc. Natrochem, Inc. Natrochem, Inc. Natrochem, Inc. Natrochem, Inc.
Coupling Agents		
Liquid Organo Silanes	<u>Aminos</u> : Silquest®: A-1100, A-1120 <u>Epoxy</u> : Silquest A-187 <u>Mercaptos</u> : Silquest: A-189, A-1891; e-free 189™ Silane <u>Methacryl</u> : Silquest A-174NT <u>Vinyls</u> : Silquest: A-151NT, A-171, A-172NT, G-170, RC-1	Momentive Performance Materials Momentive Performance Materials Momentive Performance Materials Momentive Performance Materials Momentive Performance Materials
Dry Liquid Concentrates	<u>Aminos</u> : A-1100 DLC, A-1120 DLC <u>Epoxy</u> : A-187 DLC <u>Methacryl</u> : A-174 DLC <u>Vinyls</u> : A-172 DLC, Silane 400 DLC <u>Specials</u> : Silane NX DLC (Modified Mercapto); Silane EF 189 DLC (Ethanol Free A-189)	Natrochem, Inc. Natrochem, Inc. Natrochem, Inc. Natrochem, Inc. Natrochem, Inc. Natrochem, Inc.
Dry Silane Concentrates	<u>Mercaptos</u> : DSC® 18N <u>Polysulfides</u> : DSC: 2S, 4S <u>Vinyl</u> : DSC 74	Hexpol Compounding - Specialty Products Hexpol Compounding - Specialty Products Hexpol Compounding - Specialty Products



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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, 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.
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>	<u>Very High Reinforcing:</u> N110, N121, N134	Sid Richardson Carbon Company
	<u>High Reinforcing:</u> N220, N231, N234, N299	Sid Richardson Carbon Company
	<u>Medium Reinforcing:</u> N326, N330, N339, N347, N351, N358	Sid Richardson Carbon Company
	<u>Semi-Reinforcing:</u> N550, N650, N762, N772, N774	Sid Richardson Carbon Company
	<u>Clean Semi-Reinforcing:</u> SR530, SR630, SR730	Sid Richardson Carbon Company
	<u>Specialty Grades; Inks, Coating & Plastic:</u> SR155, SR301, SR303, SR310, SR401,	Sid Richardson Carbon Company Sid Richardson Carbon Company
	<u>Conductive:</u> Sidcon 119, 159, 419	
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, GK-300, GK-500	Old Hickory Clay Company
	<u>Water-Washed:</u> GK-100, GK-170, GK-400	Old Hickory Clay Company
	<u>Surfaced-Modified:</u> GK-KE (vinyl), GK-5178 (silicone), GK-2211 (amino)	Old Hickory Clay Company
Coal - Ground	Austin Black® 325	Coal Fillers, Inc.
Fine Cellulose Filler	Solka-Floc®: 20, 40, 40E, 100, 200, 300	International Fiber
Silica - Precipitated, Hydrated, Amorphous	<u>Highly Reinforcing Grades:</u> Hi-Sil™: 134G, 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>Surface Treated Grade:</u> Agilon™: 400G-D, 454GD, 458GD	PPG Industries
	<u>High Absorbing Grade:</u> Hi-Sil ABS	PPG Industries
	<u>Amorphous Semi-Reinforcing Grade:</u> Silica S	Harwick Standard

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Fire Retardants		
Alumina Trihydrate - Ground	Polyfill: 110, 130, 203, 204, 301, 302, 402, 403, 405, 407, 301SM, 403SM	Custom Grinders Sales, Inc.
Antimony Oxides	High Tint, Low Tint Twinkling Star Brand	Harwick Standard ICC Chemical Corporation
Chlorinated Paraffins	Chloroflo® 42, Chlorowax® 40; Paroil®: 54NR, 58NR, 60H, 63NR, 140, 142, 142 LV CPW-100	Dover Chemical Dover Chemical Harwick Standard
Fire-Resistant Hydraulic Fluid	Fyrquel® 220	ICL-IP Industrial Products
Magnesium Hydroxide	Magnesium Hydroxide	Harwick Standard
Pentaerythritol	Charmor™ PT40	Perstorp Polyols
Phosphate Ester Plasticizers	<u>Aryls</u> : Lindol™ TCP, Phosflex™: 41L, 71B <u>Alkylated Aryls</u> : Phosflex: 362, 375, 390 <u>Alkyl</u> : Phosflex T-BEP	ICL-IP Industrial Products ICL-IP Industrial Products ICL-IP Industrial Products
Zinc Borates	Firebrake®: ZB, ZB Fine, ZB-XF, 415, 500	Rio Tinto Minerals
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 P = Powder	Westlake Polymers LLC Westlake Polymers LLC Westlake Polymers LLC Westlake Polymers LLC Westlake Polymers LLC Westlake Polymers LLC Westlake Polymers LLC
Low Molecular Weight Polyethylene Wax	Stan-Wax 1012	Harwick Standard
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 <u>Specialties</u> : SM-2059	Momentive Performance Materials Momentive Performance Materials Momentive Performance Materials
Silicone Fluids	<u>Alkyl</u> : SF-1147 <u>Phenyl</u> : SF-1154 <u>Specialties</u> : SF 69, SF 18-350 (FDA), SF-1023 (Silanol) <u>Standard Dimethyls</u> : Element 14 PDMS (5-1000)	Momentive Performance Materials Momentive Performance Materials Momentive Performance Materials Momentive Performance Materials
Tire Lubricants	Lubrex® BTC 15 Silicone Emulsion 350	Hexpol Compounding - Specialty Products Harwick Standard



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Magnesium Oxides		
	<u>Medium Surface Area Bar:</u> Stan-Mag® Bars	Hexpol Compounding - Specialty Products
	<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 (distearate), 505 (monostearate), 404 (tristearate)	Ferro Corporation
	<u>Calcium:</u> 114-36, NF, Wettable (precipitated); 12B, 114-40, 15F (fused)	Ferro Corporation Ferro Corporation
	<u>Magnesium:</u> 90	Ferro Corporation
	<u>Zinc:</u> 8, ACF, D, F Prill, GP, USP, Wettable (fused)	Ferro Corporation
	<u>Barium</u> Potassium, Sodium Stearates	Ferro Corporation Harwick Standard
Multifunctional Additives		
Polyethylene Glycol	<u>Liquids:</u> EF® E-200, 300, 400, 600, 1000	Environmental Fluids USA, LLC
	<u>Semi-Solids:</u> EF® E-1450, 1500, 2000	Environmental Fluids USA, LLC
	<u>Solids:</u> EF® E-3350, 4000, 6000, 8000, 20000	Environmental Fluids USA, LLC
Peroxides		
Vulcanizers and Catalysts	<u>Diacyl:</u> Luperox® A-98, ANS55, Luperox DI	Arkema, Inc.
	<u>Diacyl:</u> Noviper® DB50	Novichem
	<u>Dialkyls:</u> Di-Cup®: R, 40C, 40KE; Luperox DC40P-SP2; Vul-Cup®: R, 40C, 40KE, 40SI; Luperox F40P-SP2; Luperox: 101, 101XL45, EZD-SP2, HP101XLP Noviper DH45	Arkema, Inc. Arkema, Inc. Arkema, Inc. Novichem
	<u>Peroxyester:</u> Luperox P	Arkema, Inc.
	<u>Peroxyketal:</u> Luperox: 230XL40, 230XL40SP 231, 231XL40, 231XL40SP	Arkema, Inc. Arkema, Inc.
Pigments		
Dry Pigments	MMC: Dry Colors	Hexpol Compounding - Specialty Products
	<u>Anatase:</u> Tipaque® A-100 Titanium Dioxide	Ishihara Corp (USA)
	<u>Rutile:</u> Tipaque CR: 50, 50-2, 57, 60-2, 90, 90-2 Titanium Dioxide; Tipaque R: 630, 980 Titanium Dioxide	Ishihara Corp (USA) Ishihara Corp (USA)
	<u>Anatase:</u> Stan-Pig A-1	Harwick Standard

Product Type	Product Trade Name	Producer/Supplier
Pigments (continued)		
Dry Pigments (<i>continued</i>)	<u>Phthalocyanine Green</u> : Pigment Green: 7	Savya International
	<u>Phthalocyanine Blues</u> : Pigment Blue: 15:0, 15:1, 15:3, 15:4	Savya International
	<u>Ultramarine Blue</u> : Pigment Blue: 29	Savya International
	<u>Benzimidazolone Yellows</u> : Pigment Yellow: 151, 180	Savya International
	<u>Bisacetoacetarylide Yellow</u> : Pigment Yellow: 155	Savya International
	<u>Diarylide Yellows</u> : Pigment Yellow: 12, 13, 14, 17, 83	Savya International
	<u>Isoindoline Yellow</u> : Pigment Yellow: 139	Savya International
	<u>Monoazo Yellows</u> : Pigment Yellow: 65, 74, 183	Savya International
	<u>Monoazopyrazolone Yellow</u> : Pigment Yellow: 191:1	Savya International
	<u>Quinolone Yellow</u> : Pigment Yellow: 138	Savya International
	<u>B-Naphthol Red</u> : Pigment Red: 53:1	Savya International
	<u>Bona Ca Reds</u> : Pigment Red: 48:1, 48:2, 57:1	Savya International
	<u>Bona Sr Red</u> : Pigment Red: 48:3	Savya International
	<u>DPP Red</u> : Pigment Red: 254	Savya International
	<u>Naphthol AS Reds</u> : Pigment Red: 2, 112, 146, 188, 170, 210	Savya International
	<u>Quinacridone Red</u> : Pigment Red: 122	Savya International
	<u>Disazopyrazolone Oranges</u> : Pigment Orange: 5, 13, 34	Savya International
	<u>Dioxazine Violet</u> : Pigment Violet: 23	Savya International
<u>Quinacridone Violet</u> : Pigment Violet: 19	Savya International	
Polymeric Pigment Dispersions	MMC: Masterbatch Colors Binders: EP (EPR), EM (EPDM), FK (FKM), KD (Universal), NR (Natural Rubber), SB (SBR), MQ (Silicone)	Hexpol Compounding - Specialty Products
Custom Color & Functional Additive Concentrates/ Masterbatches for the Plastics Industry	PCVC	Prime Colorants
Plasticizers		
Adipates	Polycizer®: DBEEA, DINA, DOA	Harwick Standard
	Merrol®: 4206 (DBEA), 4226 (DBEEA)	Harwick Standard
	Natro-Flex® BCA	Natrochem, Inc.
Benzoates	Benzoflex® 9-88	Eastman Chemical
Epoxide Soybean Oil	Plas-Chek 775	Ferro Corporation
Linears	Polycizer L9P	Harwick Standard
Oleates	Polycizer Butyl Oleate	Harwick Standard
Non-Phthalate	Polycizer DOTP	Harwick Standard
Pentaerythritol Esters	CalEster 600	Calumet Missouri, LLC
Phosphate Ester Plasticizers	<u>Aryls</u> : Lindol™ TCP, Phosflex™: 41L, 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
Phthalates	Polycizer: DBP, DIDP, DINP, DOP, DPHP; Merrol DAP	Harwick Standard
Phthalate Free	Polycizer DHIN	Harwick Standard
Pine Tar Derivatives	Tarene™: 14, 20, 30, 40	Natrochem, Inc.



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Plasticizers (continued)

Polymeric	Admex®: 334F, 523, 760, 761, 6187	Eastman Chemical
Polymeric Polyester Adipates	Polycizer P-6400; Merrol P6320, P6420	Harwick Standard Harwick Standard
Sebacates	Polycizer: DBES, DBS, DOS	Harwick Standard
Specialties	Polycizer MO Plasticizer SC-E, SC-B Merrol DOZ-E, 3810	Harwick Standard Harwick Standard Harwick Standard
Tallates	Natro-Flex IOT; Merrol 818T	Natrochem, Inc. Harwick Standard
Trimellitates	Polycizer: TOTM, TOTM-E, TINTM-E; Merrol 810TM-E	Harwick Standard Harwick Standard

Polymers/Elastomers

BR

Neodymium High CIS Polybutadiene	Synteca®: 44, 63	Synthos S.A.
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CPE (Chlorinated Polyethylene)

Thermoset Grades	Tyrin®: CM 3551E, CM3630E	Dow Plastics Additives
Thermoplastic Grades	Tyrin: 3611E, 6000, 7100	Dow Plastics Additives

CR (Polychloroprene)

Mercaptan Modified Grades	Baypren®: 110 M36-46, 110 M44-54, 210, 211, 230 M92-108, 230 M98-118	Lanxess Corporation High Performance Elastomers
XD (xanthogen disulfide) Modified Grades	Baypren: M116, 126, 216	
XL (pre-crosslinked) Grades	Baypren: 214, 215	
Sulfur-Modified Grades	Baypren: 510 M37-47, 711 M37-49, 711 M42-54	

EPR

<u>Product</u>	<u>Melt Flow Index @ 190°C</u>
Keltan® 0500R	11.0
<u>Product</u>	<u>MV(1+4) @ 125°C</u>
Keltan 2070P	25
<u>Product</u>	<u>MV(1+4) @ 100°C</u>
Keltan 3050	51

Lanxess Corporation
High Performance Elastomers

EPDM

DCPD Grades	<u>Product</u>	<u>MV(1+4) @ 125°C</u>	Lanxess Corporation High Performance Elastomers
	Keltan 6160D	63	

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

EPDM (continued)

Lanxess Corporation
High Performance Elastomers

Low ENB Grades	<u>Product</u>	<u>MV(1+4) @ 125°C</u>
	Keltan 5260Q	55
	Keltan 6260Q	67

Medium ENB Grades	<u>Product</u>	<u>MV(1+4) @ 125°C</u>
	Keltan 2470L	22
	Keltan 2470	24
	Keltan 2650	25
	Keltan 2450	28
	Keltan 4450	46
	Keltan 4455	46
		<i>(contains 50 phr oil)</i>
	Keltan 4577	46
		<i>(contains 75 phr oil)</i>
	Keltan 5469	52
	Keltan 5470	55
	Keltan 5470P	55
	Keltan 5470Q	57
	Keltan 7470Q	70
	Keltan 7550	70
	Keltan 7450	76
Keltan 8550C	80	
Keltan 8570C	80	

	<u>Product</u>	<u>MV(1+8) @ 150°C</u>
	Keltan 5465Q	37
		<i>(contains 50 phr oil)</i>
	Keltan 5469Q	38
		<i>(contains 100 phr oil)</i>

High ENB Grades	<u>Product</u>	<u>MV(1+4) @ 125°C</u>
	Keltan 2450S	24
	Keltan 2750	28
	Keltan 4869C	48
		<i>(contains 100 phr oil)</i>
	Keltan 6750	60
	Keltan 6950C	65

	<u>Product</u>	<u>MV(1+8) @ 150°C</u>
	Keltan 9650Q	60

Very High ENB Grades	<u>Product</u>	<u>MV(1+4) @ 100°C</u>
	Keltan 3960Q	54

Oil Extended Grades	<u>Product</u>	
	Keltan 4455	contains 50 phr oil
	Keltan 5465Q	contains 50 phr oil
	Keltan 4577	contains 75 phr oil
	Keltan 4869C	contains 100 phr oil
	Keltan 5469Q	contains 100 phr oil
	Keltan 4455	contains 50 phr oil



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Polymers/Elastomers (continued)

EVM

Lanxess Corporation
High Performance Elastomers

Product	Weight	Melt Flow Index
	% Vinyl Acetate	(g/10 min) @ 190°C
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 686	68	25
Levamelt 700	70	4
Levamelt 800	80	4
Levamelt 900	90	4

Vinyl Acetate

Product	Content %	MV (1+4) @ 100°C
	Levapren® 400	40
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 600 XL VP	60	55
Levapren 700 XL VP	70	60

NBR

Lanxess Corporation
High Performance Elastomers

Product	% ACN	MV (1+4) @ 100°C
	Content	
Perbunan® 1846F	18	45
Perbunan 3340F	22	33
(contains 52 phr Mesamoll®)		
Perbunan 2255VP	22	57
Krynac® 2245F	26	45
Krynac 2850F	27.5	48
Krynac 2840F	28	38
Perbunan 2845F	28	45
Krynac 2860F	28	60
Krynac 2865F	28	65

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Polymers/Elastomers (continued)

NBR (continued)

Lanxess Corporation
High Performance Elastomers

	% ACN	
<u>Product</u>	<u>Content</u>	<u>MV (1+4) @ 100°C</u>
Perbunan 2870F	28	70
Perbunan 2895F	28	95
Perbunan 28120F	28	120
Perbunan 2831F	28.6	30
Perbunan 2846F	28.6	42
Krynac 2950F	30	53
Krynac 3330F	33	30
Krynac 3345F	33	45
Krynac 3360F	33	57
Krynac 3370F	33	70
Krynac 3380VP	33	80
Krynac 33110F	33	110
Perbunan 3430F	34	32
Perbunan 3445F	34	45
Perbunan 3470F	34	70
Perbunan 3431F	34.7	29
Perbunan 3446F	34.7	42
Perbunan 3481F	34.7	78
Krynac 3950F	38.5	50
Krynac 4045F	38.5	45
Perbunan 3945F	39	45
Perbunan 3965F	39	65
Krynac 3980VP	39	75
Perbunan 3976F	40	65
Krynac 4450F	43.5	50
Perbunan 4456F	44	55
Krynac 4955F	48.5	55
Krynac 4975F	48.5	75
precrosslinked grades		
Krynac XL 3025	29.5	70
Krynac XL 3355VP	33	55
Krynac XL 3470	34	70

XNBR (carboxylated)

Lanxess Corporation
High Performance Elastomers

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



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Polymers/Elastomers (continued)

NBR Powder

Lanxess Corporation
High Performance Elastomers

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

XNBR (carboxylated) Powder

Lanxess Corporation
High Performance Elastomers

Product	% ACN	
	Content	MV (1+4) @ 100°C
Baymod N XL 32.12	31.5	47.5
Baymod N XL 32.32	31.5	47.5
Baymod N XL 33.61VP	33	55
Baymod N XL 33.64VP	33	55
Baymod N XL 38.43	38	115

HNBR (hydrogenated)

Lanxess Corporation
High Performance Elastomers

Fully saturated grades	Product	% ACN		Residual
		Content	MV (1+4) @ 100°C	Double Bond Content (%)
	Therban® 3406	34.0	63	0.9 max
	Therban 3407	34.0	70	0.9 max
	Therban 3607	36.0	66	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 max
	Therban 3467	34.0	68	5.5 max
	Therban 3496	34.0	55	18.0 max
	Therban 3627	36.0	66	2.0 max
	Therban 3629	36.0	87	2.0 max
	Therban 3368VP	36.0	87	6.0 max
	Therban 4367	43.0	61	5.5 max
	Therban 4369	43.0	97	5.5 max
Low Temperature grades	Therban LT 2007	21.0	74	0.9 max
	Therban LT2057	21.0	67	5.5 max
	Therban LT2157	21.0	70	5.5 max
	Therban LT2568	25.0	77	5.5 max

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

HNBR (hydrogenated) (continued)

Lanxess Corporation
High Performance Elastomers

	Product	% ACN Content	MV (1+4) @ 100°C	Residual Double Bond Content (%)
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 max
	Therban AT 3904VP	39.0	39	0.9 max
	Therban AT 4364VP	43.0	39	5.5 max
	Therban AT 5005VP	49.0	55	0.9 max
Carboxylated grades	Therban XT KA 8889 VP	33.0	77	3.5 max
Acrylate Reinforced Technology grades (ART)	Therban VP KA 8796	34.0	22	5.5 max

FKM

DAI-EL Product	Fluorine Content	MV-ML (1+10) @ 121 C	Comments	
G-310 LBP	66	23	Bisphenol curable gum	Daikin America
G-310 MBP	66	36	Bisphenol curable gum copolymer	Daikin America
G-310 HBP	66	47	Bisphenol curable gum copolymer	Daikin America
G-384	66	42	Cure incorporated copolymer	Daikin America
G-558	69	34	Cure incorporated terpolymer	Daikin America
G-603	71	31	Cure incorporated terpolymer	Daikin America
G-621	71	50	Cure incorporated terpolymer	Daikin America
G-7200EBP	66	21	Bisphenol curable gum	Daikin America
G-7200BP	66	24	Bisphenol curable gum copolymer	Daikin America
G-7210BP	66	28	Bisphenol curable gum copolymer	Daikin America
G-7261	66	22	Cure incorporated copolymer	Daikin America
G-7300EBP	66	35	Bisphenol curable gum	Daikin America
G-7400BP	66	46	Bisphenol curable gum copolymer	Daikin America
G-7451	66	40	Cure incorporated copolymer	Daikin America
G-755CBP	66	22	Non-cure incorporated copolymer	Daikin America
G-7800BP	66	86	Bisphenol curable gum copolymer	Daikin America
G-7801	66	66	Cure incorporated copolymer	Daikin America
G-797	66	30	Cure incorporated copolymer	Daikin America
G-8002	66	25	Peroxide curable copolymer	Daikin America
G-801	66	37	Peroxide curable copolymer	Daikin America
G-802	66	20	Peroxide curable copolymer	Daikin America
G-901	71	48	Peroxide curable terpolymer	Daikin America
G-902	71	19	Peroxide curable terpolymer	Daikin America
G-912	71	56	Peroxide curable terpolymer	Daikin America
G-952	69	40	Peroxide curable terpolymer	Daikin America

PTFE Aqueous Dispersions Daikin D: 210, 310, 610

Daikin America

PTFE Molding Resins Polyflon™: M: 12, 18, 111C, 112, 532; MX-9055

Daikin America

PTFE Powders Daikin PTFE L-5F

Daikin America



General Products Listing

web: www.harwickstandard.com

phone: 330-798-9300

Product Type	Product Trade Name	Producer/Supplier
Polymers/Elastomers (continued)		
<i>PTFE Fine Powders</i>	Daikin F: 104, 104U, 107, 131, 201, 201L, 205, 207, 208, 208H, 301, 303	Daikin America
<i>Fluoropolymer Melt Resins</i>	EFEP's: Daikin: RP: 4020, 4040, 5000, 5000 AS	Daikin America
	ETFE's: Neoflon®: EP: 506, 521, 526, 541, 546,	Daikin America
<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	KER: 1500, 1502, 1507 Krallex®: 1500, 1502	Synthos S.A. Synthos S.A.
Oil-Extended	KER: 1723, 1783 Krallex: 1723, 1783	Synthos S.A. Synthos S.A.
40% Bound Styrene	KER 1739, 1789	Synthos S.A.
High Styrene Resin Masterbatch	KER 1904	Synthos S.A.
Black Masterbatch	Emulblack®: 1606R, 1847K, 1848R, 3651	INSA
Process Oils		
Aromatic	Stan-Flux LV-1	Harwick Standard
Paraffinics	Stan-Lube: 10, 60, 60P, 80, 80D	Harwick Standard
Naphthenics	Stan-Plas: 100/105, 150, 300, 500, 1200, 2000	Harwick Standard
Naphthenic (FDA)	Stan-Plas 101C (178.3620 Part C)	Harwick Standard
White Oils (Tech Grade)	Stan-Lube: 6006, 6056	Harwick Standard
White Oils (Food Grade)	Duoprime® 350	Calumet/Penreco
PVC Additives		
Acrylic Impact Modifiers	Paraloid™: KM-330, KM-334, KM-377, KM-100XPRO, KM-5000	Dow Plastics Additives
Acrylic Process Aids	Paraloid: K-120ND, K-125, K-130D, K-175, K-400, K-416, K-445, EXL-3330, EXL-3361, EXL-5136 Surecel™ 466	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
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

Product Type	Product Trade Name	Producer/Supplier
PVC Additives (continued)		
Specialty Additive - Vinyl Gloss Control	Paraloid KF-710	Dow Plastics Additives
Stabilizers for Flexible	Micro-Chek® (Biocides): 11-DIDP, 11-IPA, 11-P	Ferro Corporation
	Therm-Chek® (Mixed Metal Heat Stabilizer): Barium/Zinc Based; Calcium/Zinc Based	Ferro Corporation
	UV-Chek® (Ultra-Violet): AM-300, AM-340	Ferro Corporation
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: 108, 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		
Polyterpenes	Picolylite®: A, C, and S Series	Pinova Inc.
Rosin Resins	Foral ®: 85, 105, AX, AX-A, NC;	Pinova Inc.
	Pentalyn®: 830, A, FC, G, H, X;	Pinova Inc.
	Staybelite®: A, Ester 3, Ester 3-A, Ester 5, Ester 5-A, Ester 10	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 -
Polymeric Bound	Mixland®+, Mixland NG	MLPC International
Polymeric Modified	PolyBound® Line, FKM Masterbatches	Hexpol Compounding -
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
Insoluble Sulfur	Vulcanizing Agent IS-HS-7020, IS-HD-7020	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-4	G.H. Chemicals
	<u>Untreated - Low Surface Area-USP</u> : CR-4-USP-2	G.H. Chemicals
	<u>Untreated - Medium Surface Area</u> : CR-41	G.H. Chemicals
	<u>Untreated - High Surface Area</u> : CR-42	G.H. Chemicals
	<u>Treated - Low Surface Area</u> : CR-40	G.H. Chemicals
	<u>Treated - Medium Surface Area</u> : CR-410	G.H. Chemicals
	<u>Treated - High Surface Area</u> : CR-420	G.H. Chemicals