

Royalene, Royaledge, Triline, Royaltherm

Royalene is one of the most successful and well known EPDM brands in the industry, recognized for its high quality and consistent performance. Royalene EPDM is used in a wide variety of elastomeric applications that require superior heat, ozone and chemical resistance, excellent long term aging and outstanding weathering. Royalene applications include automotive, industrial and consumer hoses, tyre tubes, weatherseals, rollers, molded goods, wire and cable insulations, window profiles, roof sheeting, thermoplastic elastomers, and viscosity modifiers for lubricants. Choose from a wide variety of grades to meet all your specifications and performance requirements.

Royalene EPDM Grades Summary

Grade	Mooney ML 1+4		Ethylene %	E/P Ratio	Polymer Characteristics	Typical Applications
301T	40 125°C	3.1 DCPD	65	67/33	Low Mooney viscosity, DCPD polymer offering excellent processing.	In blends with butyl for inner tubes. Medium voltage cable insulation. Extruded profiles.
360	48 100°C	2.0 DCPD	51	52/48	Low Mooney viscosity, DCPD polymer offering excellent low-temperature and weathering properties.	Viscosity index improver for crankcase and industrial lubricants. Used in multi-grade lubricant formulations.
400	37 125°C	3.0 DCPD	65	67/33	Ultra high molecular weight DCDP polymer extended with 100 phr white, hydro-treatedparaffinic oil. Highly extendable.	General purpose. Low durometer compounds. In blends with butyl for inner tubes. Low voltage wire and cable insulations. TPV compounds.
505	55 125°C	8.0 ENB	55	60/40	Medium Mooney, ultra fast cure rate, excellent low-temperature properties, easy processing.	Extruded and molded sponge. Blends with diene rubber for ozone protection. Tire white sidewalls.
509	55 125°C	8.0 ENB	65	71/29	Medium Mooney, ultra fast curing. Excellent shape stability in extruded profiles.	Automotive flocked window channels, for soft sponge extrusions. Co-cures well with SBR.
510	65 125°C	4.5 ENB	72	75/25	High ethylene, fast curing polymer, excellent green strength and electrical properties. Friable bales.	Wire insulation, weatherstrips, hose and extruded products.
511	45 100°C	4.6 ENB	54	57/43	Low Mooney, fast curing grade offering exceptionally easy processing. Excellent mill handling and processing.	Molded mechanical goods, brake components, gaskets. Impact modifier. TPO compounds.
512	57 125°C	3.9 ENB	65	68/32	Medium Mooney, fast cure rate, highly extendable. Good green strength and shape retention. Friable bales.	General purpose mechanical goods. Roof sheeting, hose, extruded profiles and molded products.
515	82 150°C	9.5 ENB	56	62/38	Ultra fast curing, high molecular weight. Friable bales.	High performance applications. High quality automotive dense and sponge weatherstrips.
525	65 125°C	8.1 ENB	55	60/40	Medium Mooney, ultra fast curing grade offering exceptional low-temperature properties. Friable bales.	Automotive flocked window channels. Closed cell sponge profile extrusions. Sponge sheet.
535	51 100°C	9.4 ENB	54	60/40	Low Mooney, ultra fast curing grade offering easy mixing and processing.	Sponge and dense molded corners. High hardness (Shore D) extruded profiles. Tire white sidewalls.
539	70 125°C	4.6 ENB	71	74/26	High Mooney, fast curing, highly extendable grade offering excellent green strength. Friable bales.	Hose tubes and covers, extruded profiles and low cost mechanical goods. Impact modifier.TPO compounds.
547	57 150°C	10.0 ENB	57	63/37	High Mooney, ultra fast curing grade offering excellent compression set. Highly extendable. Friable bales.	Automotive flocked windows channels. Closed cell sponge profile extrusions. Sponge sheet.
556	60 125°C	4.5 ENB	68	71/29	Medium Mooney, fast curing grade offering good green strength. Friable bales.	General purpose. Extruded profiles, hose and mechanical goods.
559	61 125°C	2.3 ENB	60	61/39	Medium Mooney, low ENB for excellent heat aging. Good green strength, low calander shrinkage.	Sheeting molded and extruded mechanical goods. Heat resistant applications. Blends with butyl in inner tubes.
563	75 125°C	4.5 ENB	57	60/40	High Mooney, fast curing, highly extendable grade. Exceptional low-temperature and compression set properties. Friable bales.	Automotive and industrial hose. Extruded profiles. Mechanical goods.



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Grade	Mooney ML 1+4		Ethylene %	E/P Ratio	Polymer Characteristics	Typical Applications
575	55 125°C	2 ENB	58	58/42	Low ENB content for good heat aging Offer excellent milling and calendaring behavior. Good Green Strength.	Calendered roof sheeting. In blends with Butyl rubber in tubes for improved ozone resistance.
580HT	60 100°C	2.7 ENB	52	53/47	Low Mooney, low ENB grade for high temperature Service. Excellent low-temperature performance.	Mechanical goods. Conveyor belting. Chloramine resistant products. Impact modifier.TPO compounds.
636	72 125°C	9.5 ENB	56	62/38	Ultra fast curing, high molecular weight. Extended with 15 phr white, hydro-treated paraffinic oil. Friable bales.	High quality automotive dense and sponge weatherstrips and other high performance applications.
645	48 125°C	8.5 ENB	60	66/34	Ultra fast curing, very high molecular weight. Extended with 75 phr white, hydro-treated paraffinic oil. High green strength.	Abrasion, tear and wrinkle resistant super soft sponge for extruded weatherstrips. Molded sponge corners.
677	50 125°C	4.5 ENB	67	70/30	Fast curing, ultra high molecular weight. Extended with 100 phr white, hydro-treated paraffinic oil. Good green strength.	TPO/TPV compounds. Hose, tubing, profile extrusions for LCM or microwave/hot air curing. Molded products.
694	48 125°C	4.5 ENB	67	70/30	Fast curing, high molecular weight grade extended with 75 phr white, hydro-treated paraffinic oil. High green strength.	TPO/TPV compounds. Hose, tubing, profile extrusions for LCM or microwave/hot air curing. Molded products.
868XE	67 150°C	6.0 ENB	68	72/28	High Mooney, fast curing, highly extendable grade offering excellent green strength.	Extruded profiles and low cost mechanical goods. Impact modifier. TPO compounds.
RoyalEdge EPDM						
5041	26 125°C	2.8 DCPD	74	75/25	Very low Mooney, high ethylene polymer. Outstanding processing at low filler loading Excellent wet electrical stability.	Medium to high voltage insulations. Molded electrical components. Automotive ignition wire.
Trilene Liqid EPDM						
65	_	10.0 DCPD		50/50	Low ethylene terpolymer. 47,000 Da molecular weight (GPC). 177,000 cps viscosity at 100°C.	Compliant with FDA 177.2600 and FDA 175.105 Non-extractible plasticizer for peroxide-cured compounds. Roof and anti-corrosion coatings.
67	_	9.5 ENB		46/54	Very low ethylene terpolymer. 39,000 Da molecular weight (GPC). 128,000 cps viscosity at 100°C.	Non-extractible plasticizer for sulfur-cured compounds. Lowers compound viscosity and is nonvolatile in service.
77	-	10.5		74/26	High ethylene terpolymer. 27,000 Da molecular weight (GPC). 102,000 cps viscosity at 100°C.	Non-extractible plasticizer for sulfur-cured compounds. Lower compound viscosity and is nonvolatile in service. Easy handling at room temperature in solid form.
CP-80	-	-		41/59	Very low viscosity ethylene copolymer. 23,000 Da molecular weight (GPC). 76,000 cps viscosity at 100°C.	Complaint with FDA 175.105, FDA117.210, FDA 177.1520 and FDA 177.2600. Viscosity thickener for lubricant products providing excellent shear stability.
CP-1100	_	_		43/57	Extremely low viscosity copolymer. 6,400 Da molecular weight (GPC). 1,000 cps viscosity at 100°C.	Complaint with FDA 175.105, FDA 117.210, FDA 177.2600. Viscosity thickener for lubricant products providing excellent shear stability.

Royaltherm EPDM is EPDM modified with silicone rubber. It is recommended for applications that require retention of mechanical strength at elevated temperatures, weather and moisture resistance, electrical stability and compression recovery at low temperatures.

Grade	Mooney ML 1+4	Cure Hardness Shore A	Typical Applications
1411A	23 - 37	30 - 40	Vulcanized with 1.8 phr of dicumyl peroxide. Applications that accept lower tensile strength.
1721	50 - 65	55 -65	Vulcanized with 1.8 phr of dicumyl peroxide. Applications that require higher tensile strength.