

Trade Name	INCI Name	% Total Solids	Molecular Weight	Preservative	Use Level (%) as sup.	Acrylamide	Features/Benefits	Descriptions	Applications
<b>Merquat™ 5 Polymer:</b> Dry copolymer of Methacryloylox-ethyl Trimethyl Ammonium Methylsulfate (METAMS) and Acrylamide (ACAM)									
5	Polyquaternium-5	>92	4,000,000	None	0.1	< 25 ppm	Excellent slip and lubrication properties; superior application feel.	High molecular weight, non-preserved, dry powder conditioning agent with excellent slip properties	Shampoos
<b>Merquat™ 100 Polymer Series:</b> Aqueous solutions of the highly charged cationic homopolymer of Diallyl Dimethyl Ammonium Chloride (DADMAC)									
100	Polyquaternium-6	39 - 44	150,000	None	0.75 - 3	None	Provides excellent slip, lubricity and snag-free wet combability; imparts excellent wet combability.	High charge density conditioning agent	Hair color, shampoos, ethnic hair care, non-aerosol sprayable applications
106	Polyquaternium-6	30 - 36	15,000	None	0.75 - 3	None	Improves wet combability of relaxed/chemically treated hair; pH buffered; provides excellent slip, lubricity and snag-free wet combability; imparts excellent wet combability.	Low molecular weight, high charge density conditioning agent, pH buffered	
<b>Merquat™ 550 Polymer Series:</b> Copolymer solutions of Diallyl Dimethyl Ammonium Chloride (DADMAC) Acrylamide (ACAM)									
550	Polyquaternium-7	8.5 - 9.5	1,600,000	Methyl & Propyl Paraben	1 - 5	< 10 ppm	Improves wet combing and detangling properties of hair; provides luster and soft feel; provides rich, creamy foam to shampoos. Improved compatibility and clarity compared to PQ-6.	Highest conditioning in the PQ-7 family	Shampoos, styling products
550L	Polyquaternium-7	8.5 - 9.5	1,600,000	Methyl & Propyl Paraben	1 - 5	< 1 ppm		Highest conditioning, lowest acrylamide in the PQ-7 family	
550PR	Polyquaternium-7	8.8 - 9.8	1,600,000	Sodium Benzoate	1 - 5	< 1 ppm		Highest conditioning, non-paraben, lowest acrylamide in the PQ-7 family	
2200	Polyquaternium-7	>92	1,600,000	None	0.1 - 1	< 50 ppm	Contributes lubricity which can help make hair care products easier to apply; improves the wet detangling and combability of hair.	Preservative-free, dry powder conditioning agent	Hair color, shampoos, styling products
740	Polyquaternium-7	41 - 45	100,000	Sodium Benzoate	0.25 - 1	< 10 ppm	Improves wet combing and detangling properties of hair; provides luster and soft feel.	High solids, low molecular weight conditioning agent	Shampoo, styling products, non-aerosol sprayable applications
S	Polyquaternium-7	8.5 - 9.5	2,600,000	Methyl & Propyl Paraben	1 - 5	< 1 ppm	Provides excellent detangling, wet combability and softness in shampoo systems; imparts a smooth, velvety feel; provides rich, creamy foam to shampoo.	High molecular weight, improved compatibility and clarity in anionic surfactant systems	Shampoos, styling products
7SPR	Polyquaternium-7	8.8 - 9.8	2,600,000	Sodium Benzoate	1 - 5	< 1 ppm		High molecular weight, non-paraben, improved compatibility and clarity in anionic surfactant systems	
<b>Merquat™ 280 Polymer Series:</b> Ampholytic copolymer of Diallyl Dimethyl Ammonium Chloride (DADMAC) and Acrylic Acid (AA)									
280	Polyquaternium-22	39 - 43	450,000	Methyl & Propyl Paraben	1 - 3	None	Provides superior conditioning properties in high pH systems; improves the wet combability of hair dyes and provides a smooth and soft feel to hair; helps in hair dye applications; helps to improve the saturation of hair colors; reduction of ammonia and hair dye levels. In shampoo systems - improves wet and dry combing. Provides stable, rich and dense foam.	Excellent conditioning in extreme pH applications	Hair color, chemical hair treatments, conditioners, styling sprays, shampoos
280NP	Polyquaternium-22	39 - 43	450,000	None	1 - 3	None		Excellent conditioning in extreme pH applications and preservative free	
281	Polyquaternium-22	39 - 43	450,000	None	1 - 3	None		Low pH conditioning agent great for extreme pH applications and preservative free	Shampoos, hair color, chemical hair treatments, low pH applications
280SD	Polyquaternium-22	>94	450,000	None	0.4 - 1.2	None		Dry powder, non-preserved and excellent conditioning in extreme pH applications	Hair color, hair dyes, dry hair bleach
295	Polyquaternium-22	35 - 40	190,000	None	1 - 3	None	Provides superior conditioning properties for products with extreme pH ranges; especially designed for relaxer and hair color systems; improves the wet combability of hair dyes and provides a smooth and soft feel to hair; provides stable, rich and dense foam.	Highly charged conditioning agent with great compatibility and preservative free	Shampoos, color protection shampoos, hair color, chemical hair treatments, hair repair



Trade Name	INCI Name	% Total Solids	Molecular Weight	Preservative	Use Level (%) as sup.	Acrylamide	Features/Benefits	Descriptions	Applications
<b>Merquat™ 3330 Polymer Series:</b> Ampholytic terpolymer of Acrylic Acid (AA), Diallyl Dimethyl Ammonium Chloride (DADMAC) and Acrylamide (ACAM)									
PLUS 3330	Polyquaternium-39	9.4 - 10.4	1,500,000	Methyl & Propyl Paraben	1 - 3	< 1 ppm	Improves the wet feel of hair; imparts excellent dry combability; helps hold curls without flaking; compatible with most anionic and amphoteric surfactants, mildness sensory in shampoos.	Good conditioning polymer designed to reduce irritation from surfactants	Shampoos, styling products, and semi-permanent hair colors. Non-aerosol sprayable applications for Merquat™ 3940 polymer
3330PR	Polyquaternium-39	10.2 - 11.5	1,500,000	Sodium Benzoate	1 - 3	< 1 ppm		Non-paraben polymer designed to reduce irritation from surfactants	
3330DRY	Polyquaternium-39	< 92	1,500,000	None	0.1 - 0.4	< 3ppm		Dry powder, non-preserved polymer designed to reduce irritation from surfactants	
PLUS 3331	Polyquaternium-39	9.4 - 10.4	1,600,000	Methyl & Propyl Paraben	1 - 3	< 1 ppm		Good conditioning polymer designed to reduce irritation from surfactants, different mole ratio	
3331PR	Polyquaternium-39	9.4 - 10.7	1,600,000	Sodium Benzoate	1 - 3	< 1 ppm		Non-paraben, high charge density polymer designed to reduce irritation from surfactants, different mole ratio	
3940	Polyquaternium-39	41 - 45	150,000	Sodium Benzoate	0.25 - 1	< 10 ppm		High solids, low molecular weight, non-paraben, conditioning agent to reduce irritation from surfactants	
<b>Merquat™ 2001 Polymer Series:</b> Aqueous solutions of an amphoteric terpolymer of Acrylic Acid (AA), Methacrylamido-propyl Trimethyl Ammonium Chloride (MAPTAC) and Methylacrylate (MA)									
2001	Polyquaternium-47	20 - 22	1,200,000	Sodium Benzoate	1 - 3	None	Superior detangling and wet combing; improves color protection properties; improves the dry properties of hair softness and smoothness; provides rich and luxurious foam.	Excellent conditioning polymer for improving wet and dry properties and color protection	Shampoos, color protection shampoos, conditioning rinses, styling products, thermal protection, hair repair
<b>Merquat™ 2003PR Polymer Series:</b> Aqueous solution of an ampholytic terpolymer of Methacrylamido-propyl Trimethyl Ammonium Chloride (MAPTAC), Acrylamide (ACAM) and Acrylic Acid (AA)									
2003PR	Polyquaternium-53	19.5 - 22.5	1,200,000	Phenoxyethanol	1 - 3	< 5 ppm	Improves the softness and smoothness of hair; enhances color protection - protects hue, value and saturation up 20 washes; used for non-silicone systems; makes hair dye formulations smoother and easier to apply; helps to improve the intensity of hair colors; reduction of ammonia and hair dye levels; improves foam stability and provides dense creamy foam.	Excellent non-paraben conditioning polymer for superior performance in color protection and non-silicone shampoos	Color protection shampoos, hair dyes, leave-in conditioners, hair treatments, thermal protection, hair repair

\* Note: If reference to solid is not stated in the description, polymer is a liquid.

\*\* These are typical properties. See the specification for the certified properties



For complete formulation details, samples and more information call 800.379.5389 or visit [www.lubrizon.com/personalcare](http://www.lubrizon.com/personalcare)

The information contained herein is being furnished for informational purposes only, upon the express condition that the User makes its own assessment of the appropriate use of such information. While the information contained herein is believed to be reliable, no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for a particular application or the results to be obtained herefrom. Lubrizon Advanced Materials, Inc. ("Lubrizon") cannot guarantee how any products associated with this information will perform in combination with other substances or in User's process. Due to the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the information/products for the applications disclosed. Lubrizon shall not be liable and the User assumes all risk and responsibility for, any use or handling of any material beyond Lubrizon's direct control. LUBRIZON MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. It is the User's sole responsibility to determine if there are any issues relating to patent infringement of any component or combination of components relating to the supplied information. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without the permission of the patent owner. © Copyright 2017 Lubrizon Advanced Materials, Inc.