#### **Product Description**

Provides block resistance and slip, has broad global food contact compliance, and has wide pH compatibility

Used as a slip and anti-block additive for auto polish formulations

Additive for polish formulations provides buffability, gloss enhancement, and mar resistance with an exceptionally small particle size

Provides slip, gloss, and blocking resistance in a variety of coating applications for graphic arts, paints and varnishes

Used as an additive in car polish, paints, coatings, and graphic arts to increase scratch resistance, lubrication, release, and block resistance

Provides slip and anti-block properties in coatings, adhesives, graphic arts, wood, and packaging

Can provide slip, release, and anti-blocking properties in a number of applications from wood coatings to being blended with synthetic and natural lattices

An additive used to provide buffability, black heel resistance, and slip control for the floor care and wood varnish industry

Used to provide superior slip, abrasion resistance, and block resistance in paint, varnish, and wood applications.

Provides excellent slip, mar resistance, and anti-blocking properties for industrial coatings; also used as a release and slip aid in adhesives and paper coatings

Used in water-based coatings to improve slip, rub, and block resistance; also effective for mar resistance in floor and car polish formulations

Used in floor polish and wood varnishes for black heel mark resistance, toughness and buffability, and mar, scuff, and chemical resistance

Used in water-based coatings to improve slip, rub resistance, hardness and/or block resistance; proven very effective for mar resistance in floor polish

Provides mar, rub, block, and scratch resistance in coatings and graphic arts formulations

Used in floor polish and overprint varnishes when a high degree of slip resistance is needed; also provides durability and scratch resistance to wood applications

Provides excellent anti-blocking and release properties for building paint, industrial molding, and industrial wood applications

Imparts good water bead and color to wood and concrete coatings; contains 99.5% natural ingredients

A natural oil emulsion that imparts water resistance to wood and concrete

Effective as a sacrificial anti-graffiti coating; improves water resistance in industrial and wood coatings; excellent lubricity and mold release in industrial moldings

Provides early water resistance and lubricity in a variety of coatings for wood construction products and paper

Designed to provide release in industrial molding applications

Exhibits a high degree of water, block, and mar resistance, has excellent compatibility, and is used in many water-based coating applications

This fine particle sized emulsion provides excellent water repellency, block resistance, and lubricity when added to varnishes and coatings without affecting gloss

An excellent early water beading and anti-blocking agent for exterior coatings; also used for hot tire scuff resistance

Provides excellent water beading, water repellence, release, and anti-block for wood and architectural coatings

Enhances water repellency, water beading, and moisture/moisture vapor resistance; also widely used in the wood coatings industries

Provides lubricity and is effective as a high temperature mold release for metal dies

Provides excellent anti-blocking and scratch resistance in coatings as well as rub resistance in inks and overprint varnishes

A water resistant coat additive that provides long lasting water beading and swell resistance

Provides excellent water resistance for topical wood coatings, reduces the swelling of wood in the presence of water, and provides great water bead

A high solids and low VOC wood coat additive for exterior wood and wood composites that provides good water beading and swell resistance

Offers good water beading and anti-swell; use this product when intercoat adhesion or recoatability are required

Imparts excellent early water resistance and release properties when used as an additive in wood coatings, furniture coatings, and other water-based coatings

A stable high solids water resistant additive for coatings; also effective in controlling concrete curing and release for industrial molding applications

A water repellent additive used effectively for the curing and protection of concrete

A process coating for metals to improve water holdout, scratch resistance, and adhesion

A water-based metal strapping lubricant and fully formulated coating; may be applied by E-coating or dipping; acts as a durable and lubricious coating

Provides mar resistance properties when used as an additive in paint coating, ink and graphic arts formulations

Improves rub and abrasion resistance in pigmented coatings, semi-gloss coatings, and inks and overprint varnishes at low addition rates; a one micron dispersion

Improves block, rub, and abrasion resistance and improves matting in pigmented coatings, semi-gloss coatings, inks, and overprint varnishes at low addition rates

Water-based additive which provides excellent lubricity in industrial coatings, inks, and overprint varnishes

Used as a leveling aid and gloss enhancer; improves buffability and mar resistance in floor finishes and auto polish formulas

Provides outstanding adhesion to metallic and cellulosic substrates and enhances the water, grease, oil, and solvent resistance of coatings and adhesives

Provides outstanding adhesion to metallic and cellulosic substrates and enhances the water, grease, oil, and solvent resistance of coatings and adhesives



# MICHELMAN<sup>®</sup> Additives Product Portfolio

## Innovating a Sustainable Future

As a global developer and manufacturer of environmentally friendly advanced materials for industry, Michelman offers solutions for the coatings, printing & packaging, and industrial manufacturing markets. Motivated by unwavering values, and ingrained with a passion for environmentally conscious innovation, we help companies around the

globe establish and achieve their product development goals. With access to Michelman's expert materials resources, a compelling combination of world-class talent and specialty chemistries, our customers are excelling in the diverse range of markets they serve with sustainable and responsible solutions.

### MICHELMAN<sup>®</sup>

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MICHELMAN Additives Product Portfolio TECHNICAL DATA PROPERTIES APPLICATIONS

	Solids Type	Product Name	%NV	Emulsifier Charge	рН	Rec pH	Abrasion Resistance	Scratch Resistance	Lubricity	Slip Resistance	Block Resistance	Water Resistance	Matting	High Gloss	Release	Adhesion	Wood Coatings	Industrial Coatings	Architectural Coatings	Inks & OPVs	Leather & Textile Finishes	Polishes	Mold Releases & Die Castings	Adhesives
Wax Emulsions	Carnauba	Michem® Emulsion 17525	24.5 - 25.5	Nonionic	3.0 - 8.0	2.0 - 12.0		•	•		•				•		•	•		•			,	•
		Michem® Emulsion 20117	16.0 - 18.0	Cationic	4.5 - 6.5	< 7.0			•		•			•								•		
		Michem® Emulsion 24414	13.5 - 14.5	Anionic	8.5 - 9.5	7.0 - 12.0								•								•		
		Michem® Emulsion 67135	34.5 - 35.5	Anionic	3.0 - 6.0	1.0 - 12.0	•							•										•
		Michem® Lube 156PFP	24.5 - 25.5	Nonionic	4.5 - 7.5	1.0 - 12.0	•		•		•							•		•	•	•	•	•
		Michem® Lube 160PFP	24.5 - 25.5	Anionic	4.0 - 7.0	1.0 - 12.0	•	•	•		•						•	•		•	•			•
	Carnauba/Paraffin Wax Blend	Michem® Lube 985	39.5 - 40.5	Anionic	4.5 - 7.0	1.0 - 12.0		•	•		•						•	•		•	•			•
	Ethylene Acrylic Acid Copolymer	Michem® Emulsion 95435	34.5 - 35.5	Nonionic	9.5 - 10.5	> 7.0		•	•	•				•								•	•	
	Fischer Tropsch	Michem® Emulsion 98040M1	38.0 - 42.0	Nonionic	3.0 - 10.0	2.0 - 12.0	•	•	•		•				•		•	•					•	
	High Density Polyethylene	Michem® Emulsion 61335	34.5 - 35.5	Anionic	9.7 - 10.7	> 7.0	•	•	•								•	•		•				•
		Michem® Emulsion 67235	34.5 - 35.5	Nonionic	9.7 - 11.0	> 7.0		•	•		•			•			•	•			•	•	•	
		Michem® Emulsion 93135M	34.5 - 35.5	Nonionic	9.5 - 11.0	> 7.0												•					•	
		Michem® Emulsion 93235	34.5 - 35.5	Nonionic	8.5 - 10.5	> 7.0		•			•										•	•	•	•
		Michem® Lube 190	34.5 - 35.5	Anionic	8.7 - 9.7	> 7.0			•		•	•							•				•	•
	Maleated Polypropylene	Michem® Emulsion 94340	39.5 - 40.5	Anionic/Nonionic	7.5 - 9.0	> 7.0	•			•							•		•	•			•	
	Microcrystalline	Michem® Emulsion 48040M2	39.5 - 40.5	Nonionic	< 10.0	1.0 - 12.0			•		•							•		•	•			•
	Organic	NatureShield® 30	29.5 - 30.5	Anionic	8.0 - 9.0	> 7.0						•					•		•					
		NatureShield® 40	39.5 - 40.5	Anionic	7.0 - 9.0	7.0 - 12.0		•				•					•	•	•					
	Paraffin	Michem® Emulsion 47950	49.0 - 51.0	Nonionic	4.0 - 10.0	1.0 - 12.0						•					•	•	•					
		Michem® Emulsion 71450	48.0 - 52.0	Anionic	9.5 - 10.5	> 7.0			•		•	•					•							
		Michem® Emulsion 71731M	30.0 - 32.0	Anionic	8.5 - 9.5	> 7.0					•	•					•	•	•				•	
		Michem® Lube 743	31.5 - 32.5	Nonionic	6.0 - 7.5	-		•	•		•	•			•		•	•		•	•		•	•
	Paraffin/Polyethylene Wax Blend	Michem® Emulsion 62330	29.5 - 30.5	Anionic	9.4 - 10.4	> 7.0			•			•		•			•	•	•		•			•
		Michem® Emulsion 66035	34.5 - 35.5	Anionic	9.3 - 10.3	> 7.0											•		•		•			
		Michem® Lube 511	34.5 - 35.5	Anionic	8.4 - 9.4	> 7.0					•	•			•		•		•					•
		Michem® Lube 693	38.5 - 39.5	Anionic	9.0 - 10.0	> 7.0					•	•			•		•	•	•					•
	Polyethylene	Michem® Emulsion 52137	36.5 - 37.5	Nonionic	8.5 - 9.5	2.0 - 12.0		•	•		•				•			•				-	•	
		Michem® Emulsion 91240G	39.5 - 40.5	Nonionic	5.0 - 8.0	2.0 - 12.0	•	•	•								•	•		•				
	Proprietary	Michem® Wood Coating 44	43.5 - 44.5		8.0 - 10.0							•							•					
		Michem® Wood Coating 50	29.0 - 31.0		8.8 - 10.3							•					•		•					
		Michem® Wood Coating 70 LV	49.0 - 51.0		8.8 - 10.3							•					•		•					
		Michem® Wood Coating 75	29.0 - 31.0		8.3 - 10.3							•					•		•					
	Scale Wax	Michem® Emulsion 70750	48.0 - 52.0		9.5 - 10.5						•	•			•		•	•	•	•	•			
		Michem® Emulsion 71150	50.0 - 51.0		9.5 - 10.5						•	•			•		•	•	•	•	•			•
		Michem® Emulsion 73550	49.5 - 50.5		4.5 - 6.5							•						•	•		•			
	Synthetic Wax Blend	Michem® Emulsion 25317	16.5 - 17.5		8.5 - 10.0			•	•			•				•		•						
	,	Michem® Emulsion 51715		Nonionic	7.5 - 10.0			•	•									•						
Dispersions	Amide	Michem® Guard 3716		Nonionic		2.0 - 12.0	•	•	•		•		•											
2.500.50	Polyethylene	Michem® Guard 1350		Nonionic		4.0 - 10.0	•	•	•		•						•	•	•	•				•
	,,	Michem® Guard 7140	39.5 - 40.5			4.0 - 10.0	•	•									•							
	PTFE	Michem® Glide 37		Nonionic		2.0 - 12.0		•	•						•			•		•			•	
Specialty Dispersions	Acrylic Resin	Michem® Dispersion 91530	29.0 - 31.0		8.2 - 9.7									•								•		
Specially Dispersions	Ethylene Acrylic Acid Copolymer	Michem® Prime 4983 – 40R		Ammoniated dispersion	7.4 - 8.4											•				•				
	Zaryrone / teryric / terd Coporymer	Michem® Prime 4983R		Ammoniated dispersion	8.4 - 9.4											•		•		•				
		PHOTOLIN FILLING 4303K	۷+.۷ - ۷۵.4		0.4 - 7.4	< 1.U																		