## **Product Description**

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 when used in coatings for adhesives, graphic arts, wood and packaging.

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

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

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

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

Provides mar, rub, block and scratch resistance as well as improved water resistance in coatings and graphic arts formulations.

Used in floor polish and overprint varnish formulations when slip resistance is needed. Provides durability and scratch resistance to wood applications.

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

Effective as a sacrificial anti-graffiti coating and can also contribute water resistance to industrial and wood coatings. Provides lubricity and serves as a mold release.

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.

Exhibiting a high degree of water block and mar resistance and excellent compatibility. This product is used in many water-based coating applications.

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

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. It also is successfully used for hot tire scuff resistance in asphalt.

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. This product is widely used in the wood coatings industries.

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

Used in water-based coatings to improve slip, rub resistance, hardness and/or block resistance. It is effective for mar resistance in floor and car polish formulations.

Provides excellent anti-blocking, scratch and mar resistance as well as gloss in inks, coatings and overprint varnishes.

Water resistant penetrating topical wood treatment with excellent weatherability and color stability.

Provides excellent water resistance for topical wood coatings. Reduces the swelling of wood in the presence of water as well as providing great water bead.

Provides excellent water resistance for topical wood coatings. Reduces the swelling of wood in the presence of water and giving great water bead with lower VOC.

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. It is 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.

Containing 99.5% natural ingredients, this additive imparts good water bead and color to wood and concrete coatings.

Provides excellent water resistance for topical wood coatings by preventing the swelling of wood in the presence of water as well as providing great water bead.

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

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

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

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

One micron dispersion which improves rub and abrasion resistance in pigmented and semi-gloss coatings and inks and overprint varnishes at low addition rates.

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

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

An additive best used as a leveling aid, gloss enhancer and for buffability and mar resistance for the floor finish industry and for 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.

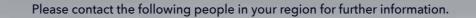
## MICHELMAN<sup>®</sup>



## 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.



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MICHELMAN Additives Product Portfolio																										
				Properties								Applications														
	Product Name	Solids Type	0 0	av Emulsif	ier Charge	pH Re	c pH Abr	asion Resistance	atch Resistance	ricity Slip	Resistance Blo	ck Resistance Water	Resistance	ting High	1.Glo <sup>55</sup> Rel	ease Adh	<sub>Resion</sub> W	good Coating Indi	ustrial Coating	chitectural Coatin	9 8 OPV5	eather & Police	shes Mo	nd Release & Adl	hesive Product Name	
Wax Emulsion	n																									
Michem® Emuls		Carnauba	16.0-18.0	Cationic	4.5-6.5	< 7.0		•	•		•			•								•			Michem® Emulsion 20117	
Michem® Emuls		Carnauba	13.5-14.5	Anionic	8.5-9.5	7.0-12.0		•	•					•								•			Michem® Emulsion 24414	
Michem® Emuls		Carnauba	34.5-35.5	Anionic	3.0-6.0	1.0-12.0	•	•	•		•			•			•	•	•	•	_			•	Michem® Emulsion 67135	
Michem® Lube Michem® Lube		Carnauba Carnauba	24.5-25.5 24.5-25.5	Nonionic Anionic	4.5-7.5 4.0-7.0	1.0-12.0 1.0-12.0	•		•		•				•		•	•		• •	•	•	•	• •	Michem® Lube 156PFP  Michem® Lube 160PFP	
Michem® Emuls		Ethylene Acrylic Acid Copolymer	34.5-35.5	Nonionic	9.5-10.5	> 7.0			• •	•				•								• •	•		Michem® Emulsion 95435	
Michem® Emuls		High Density Polyethylene	34.5-35.5	Anionic	9.7-10.7	> 7.0	•	• •	•								•	•		•			, —	•	Michem® Emulsion 61335	
Michem® Emuls		High Density Polyethylene	34.5-35.5	Nonionic	9.5-11.0	> 7.0		•	•		•				•		•	• •			•	•	• •		Michem® Emulsion 93135M	
Michem® Emuls	sion 93235	High Density Polyethylene	34.5-35.5	Nonionic	8.5-10.5	> 7.0		• •	•		•			•	•		•	•	•	•	•	• •	•	•	Michem® Emulsion 93235	
Michem® Lube		High Density Polyethylene	34.5-35.5	Anionic	8.7-9.7	> 7.0		•	•		•	•					•		•	•			•	•	Michem® Lube 190	
Michem® Emuls		Maleated Polypropylene	39.5-40.5	Anionic / Nonionic	7.5-9.0	> 7.0	•			•							•		•	•			•		Michem® Emulsion 94340	
Michem® Emuls  Michem® Emuls		Microcrystalline  Paraffin	39.5-40.5	Nonionic	< 10.0 4.0-10.0	1.0-12.0 1.0-12.0			•		•							•		•	•				Michem® Emulsion 48040M2	
Michem® Emuls		Paraffin	49.0-51.0 48.0-52.0	Nonionic Anionic	9.5-10.5	> 7.0			•		• •	•					•	•	• •				,———		Michem® Emulsion 47950 Michem® Emulsion 71450	
Michem® Emuls		Paraffin	30.0-32.0	Anionic	8.5-9.5	> 7.0												•	•				•		Michem® Emulsion 71731M	
Michem® Lube		Paraffin	31.5-32.5	Nonionic	6.0-7.5	-		•	•		•	•			• •		•	•		•	•		•	•	Michem® Lube 743	
Michem® Lube	985	Carnauba/Paraffin Wax blend	39.5-40.5	Anionic	4.5-7.0	1.0-12.0		•	•		• •						•	•		•	•			•	Michem® Lube 985	
Michem® Emuls		Paraffin / Polyethylene Wax blend	29.5-30.5	Anionic	9.4-10.4	> 7.0			•			•		•			• •	•	• •		•			•	Michem® Emulsion 62330	
Michem® Emuls		Paraffin / Polyethylene Wax blend	34.5-35.5	Anionic	9.3-10.3	> 7.0											• •		• •		•				Michem® Emulsion 66035	
Michem® Lube		Paraffin / Polyethylene Wax blend	34.5-35.5	Anionic	8.4-9.4	> 7.0					•	•			•		•		•				,	•	Michem® Lube 511	
Michem® Lube Michem® Emuls		Paraffin / Polyethylene Wax blend Polyethylene	38.5-39.5 36.5-37.5	Anionic Nonionic	9.0-10.0 8.5-9.5	> 7.0 2.0-12.0		•			•	• •			•		•	•	•					•	Michem® Lube 693 Michem® Emulsion 52137	
Michem® Emuls		Polyethylene	34.5-35.5	Nonionic	9.7-11.0	> 7.0		• •	•		•			•	•		•				•		• •		Michem® Emulsion 67235	
Michem® Emuls		Polyethylene	39.5-40.5	Nonionic	5.0-8.0	2.0-12.0	•	• •												• •					Michem® Emulsion 91240G	
Michem® Wood		Proprietary	43.5-44.5	Anionic	8.0-10.0	> 6.0						•							•				, —		Michem® Wood Coating 44	
Michem® Wood		Proprietary	29.0-31.0	Anionic	8.8-10.3	> 6.0						• •					• •		•				,		Michem® Wood Coating 50	
Michem® Wood	Coating 75	Proprietary	29.0-31.0	Anionic	8.3-10.3							• •					• •		•						Michem® Wood Coating 75	
Michem® Emuls		Scale Wax	48.0-52.0	Anionic	9.5-10.5	> 7.0					•	• •			•		•	•	•	•	•		,		Michem® Emulsion 70750	
Michem® Emuls		Scale Wax	50.0-51.0	Anionic	9.5-10.5	> 7.0					•	•			•		•	•	•	• •	•				Michem® Emulsion 71150	
Michem® Emuls NatureShield® 3		Scale Wax Organic	49.5-50.5 29.5-30.5	Cationic Anionic	4.5-6.5 8.0-9.0	> 7.0 > 7.0						•					•	•	•		•		,———		Michem® Emulsion 73550  NatureShield® 30	
NatureShield® 3		Organic	29.5-30.5	Anionic	7.7-8.7	> 7.0											• •						,——		NatureShield® 31	
NatureShield® 4		Organic	39.5-40.5	Anionic	7.0-9.0	7.0-12.0		•				•					•	•	•						NatureShield® 40	
Michem® Emuls		Synthetic Wax blend	16.5-17.5	Anionic	8.5-10.0	> 7.0		•	• •			•				•		• •							Michem® Emulsion 25317	
Michem® Emuls	sion 51715	Synthetic Wax blend	15.0-16.0	Nonionic	7.5-10.0	> 7.0	•	•	• •									• •							Michem® Emulsion 51715	
Dispersion																										
Michem® Guard	d 3716	Amide	15.0-17.0	Nonionic	6.0-8.0	2.0-12.0	•	•	•		•		•		•										Michem® Guard 3716	
Michem® Guard		Polyethylene	49.5-50.5	Nonionic		4.0-10.0	•	• •	•		•						•	•	•	•			,	•	Michem® Guard 1350	
Michem® Guard		Polyethylene	39.5-40.5	Anionic		4.0-10.0	•	• •					•				•								Michem® Guard 7140	
Michem® Glide	37	PTFE	49.5-50.5	Nonionic	3.0-7.0	2.0-12.0	•	•	• •		•				•			•		•			•		Michem® Glide 37	
Specialty Disp	persion																									
Michem® Dispe	erion 91530	Acrylic Resin	29.0-31.0	-	8.2-9.7	-								• •								• •	,		Michem® Disperion 91530	
Michem® Prime		Ethylene Acrylic Acid Copolymer		Ammoniated dispersion		> 7.0										• •		•		•				•	Michem® Prime 4983-40R	
Michem® Prime		Ethylene Acrylic Acid Copolymer	24.2-25.4	Ammoniated dispersion	_	> 7.0										• •		•		•				•	Michem® Prime 4983R	
	Product Name	Solids Type	% <sub>\(\lambda\)</sub>	IV Emulsin	ier Charge	PH Red	S PH Abra	Scrasion Resistance	atch Resistance	ricity Slip	Resistance	Water Water	Matter Resistance	ting High	Gloss Rele	Adh Pase	nesion Wo	India Coating	Ard Ard Coating	chitectural Coating	& OPVs	Leather & Polishes	ish <sub>es</sub> Die	Nold Release &	hesive Product Name	
	Technical Data												Properties									Applications				