

FINE POWDERS

Microease

Ultrafine biodegradable synthetic wax powders suitable primarily as economical dry binders. Microease offers pleasant aesthetics for loose and pressed powders, as well as emulsion systems. Offered in both irregular and spherical particle shapes. Worldwide approval.

Properties	Microease 110XF	Microease 110S	Microease 114S
INCI Name	Synthetic Wax	Synthetic Wax	Synthetic Wax
Color	White	White	White
Particle Shape	Irregular	Spherical	Spherical
Melting Point (°C)	108-113	108-113	110-116
Density @25°C (g/cc)	0.93	0.93	0.95
Mean Particle Size (µm)	4.5-6.5	6.0-8.0	6.0-8.0
Biodegradability	Freshwater	Freshwater	Freshwater

Microcare

A hybrid ultrafine powder combining natural carnauba wax with biodegradable synthetic wax for improved lubricity and aesthetics. *Worldwide approval*.

Properties	Microcare 325
INCI Name	Copernicia Cerifera (Carnauba) Wax Synthetic Wax
Color	Off-White
Particle Shape	Irregular
Melting Point (°C)	107-113
Density @25°C (g/cc)	0.97
Mean Particle Size (µm)	4.5-5.5
Biodegradability	Freshwater

Micropoly®

Ultrafine polyethylene powders with noticeably creamy aesthetics for various leave-on applications. The spherical options improve optical blurring and soft focus, while being effective line-fillers. Worldwide approval.

Properties	Micropoly 1160S	Micropoly 200	Micropoly 220	Micropoly 220L	Micropoly 250S
INCI Name	Polyethylene	Polyethylene	Polyethylene	Polyethylene	Polyethylene
Color	White	White	White	White	White
Particle Shape	Spherical	Irregular	Irregular	Irregular	Spherical
Melting Point (°C)	109-112	109-111	123-125	123-125	129-131
Density @25°C (g/cc)	0.92	0.96	0.97	0.97	0.97
Mean Particle Size (µm)	15.0-20.0	6.0-8.0	6.0-8.0	8.0-10.0	2.0-4.0

Mattewax

Ultrafine polypropylene powder that imparts a matte finish in a variety of skin, color and hair care applications. *Worldwide approval.*

Properties	Mattewax 511
INCI Name	Polypropylene
Color	White
Particle Shape	Irregular
Melting Point (°C)	160-170
Density @25°C (g/cc)	0.89
Mean Particle Size (µm)	10.0-15.0





Microsorb

Ultrafine oil-absorbing powder that enhances formulations which may feel too heavy or greasy. Effective oil absorption without over-drying. Can be utilized to reduce oil in formulations, or on the skin as an oil-control aid. *Worldwide approval*.

Properties	Microsorb 988S
INCI Name	Synthetic Wax Calcium Silicate/Silica
Color	White
Particle Shape	Spherical
Melting Point (°C)	110-114
Density @ 25°C (g/cc)	1.31
Mean Particle Size (µm)	22.0-30.0

FINE POWDERS

Microcare

Ultrafine biodegradable *Copernicia cerifera* (Carnauba) wax that provides superior adhesion and long-wear. Ultrafine naturally derived glycol montanate is a mined Montan (lignite) mineral wax that enhances formulation aesthetics. *Worldwide approval*.

Properties	Microcare 350 👸	Microcare 730
INCI Name	Copernicia Cerifera (Carnauba) Wax	Glycol Montanate
Color	Off-White	Off-White
Particle Shape	Irregular	Irregular
Melting Point (°C)	83-86	82-88
Density @25°C (g/cc)	1.00	1.01
Mean Particle Size (µm)	6.0-8.0	7.0-9.0
Biodegradability	Freshwater/Marine	Not tested

Ecosoft®

Ultrafine powders based on polylactic acid (PLA) that provide slip with extremely silky silicone-like aesthetics. Worldwide approval except China.

Properties	Ecosoft 608 🏈	Ecosoft 608XF 🤡	Ecosoft 611 🧭
INCI Name	Polylactic Acid	Polylactic Acid	Polylactic Acid Copernicia Cerifera (Carnauba) Wax
Color	White	White	Slightly Yellow
Particle Shape	Irregular	Irregular	Irregular
Melting Point (°C)	170-180	170-180	140-150
Density @25°C (g/cc)	1.25	1.25	1.11
Mean Particle Size (µm)	16.0-20.0	8.0-12.0	8.0-12.0
Biodegradability	Compostable	Compostable	Compostable

Naturesoft

Natural, biodegradable ultrafine powders. Worldwide approval.

- Naturesoft 800 provides dry binding, oil absorption and mattifying with a reduced wet/tacky feel in emulsions.
- Naturesoft 810 is a surface-treated powder that is highly effective in pressed powders as a sole dry binder, and in personal care applications to elevate richness and provide luxurious aesthetics.
- Naturesoft 860R offers best-in-class dry binding with mattifying and oil binding properties.

Properties	Naturesoft 800	Naturesoft 810 👸	Naturesoft 860R 🎳
INCI Name	Cellulose	Hydrogenated Castor Oil Jojoba Esters Tocopherol	Oryza Sativa (Rice) Bran Wax
Color	White	White	White
Particle Shape	Irregular	Irregular	Irregular
Melting Point (°C)	N/A	82-87	77-82
Density @25°C (g/cc)	1.5	0.98	0.96
Mean Particle Size (µm)	7.0-12.0	5.0-9.0	6.0-10.0
Biodegradability	Freshwater	Freshwater	Freshwater

Naturesorb

Ultrafine oil-absorbing powder based on natural Copernicia cerifera (Carnauba) wax that provides oil control with improved adhesion and long wearing properties. Worldwide approval.

Properties	Naturesorb 1000
INCI Name	Copernicia Cerifera (Carnauba) Wax / Calcium Silicate
Color	Off-White
Particle Shape	Irregular
Melting Point (°C)	83-86
Density @ 25°C (g/cc)	1.29
Mean Particle Size (µm)	22.0-30.0
Biodegradability	Freshwater/Marine



EXFOLIANTS

Naturescrub®

Irregular biodegradable exfoliants derived from *Copernicia cerifera* (Carnauba) wax, hydrogenated *Ricinus communis* (Castor) seed oil, and Glycol Montanate. Offered in several particle sizes, as well as a brown natural alternative to walnut shells. Naturescrub Cocoa C50 has a rich natural brown color with no added pigments or dyes. *Worldwide approval*.

Properties	Naturescrub C20 💝	Naturescrub C50 💝	Naturescrub Cocoa C50 💝	Naturescrub M20	Naturescrub M50
INCI Name	Copernicia Cerifera (Carnauba) Wax	Copernicia Cerifera (Carnauba) Wax	Copernicia Cerifera (Carnauba) Wax	Glycol Montanate	Glycol Montanate
Particle Shape	Irregular	Irregular	Irregular	Irregular	Irregular
Color	Light Yellow	Light Yellow	Brown	Off-White	Off-White
Melting Point (°C)	83-86	83-86	83-86	82-88	82-88
Density @25°C (g/cc)	0.99	0.99	0.99	1.01	1.01
Maximum Particle Size (mesh)	20	50	50	20	50
Maximum Particle Size (µm)	840	297	297	840	297
Biodegradability	Freshwater/Marine	Freshwater/Marine	Freshwater/Marine	Not tested	Not tested

Properties	Naturescrub H14 💝	Naturescrub H20 💝	Naturescrub Mocha H35	Naturescrub H50 ኛ
INCI Name	Hydrogenated Castor Oil	Hydrogenated Castor Oil	Hydrogenated Castor Oil/Caprylic/Capric Triglycerides/Yellow 5 Lake/Yellow 6 Lake/Red 7 Lake/Iron Oxides/Titanium Dioxide/Lecithin	Hydrogenated Castor Oil
Particle Shape	Irregular	Irregular	Irregular	Irregular
Color	White	White	Brown	White
Melting Point (°C)	82-87	82-87	82-87	82-87
Density @25°C (g/cc)	0.99	0.99	0.99	0.99
Maximum Particle Size (mesh)	14	20	35	50
Maximum Particle Size (µm)	1410	840	500	297
Biodegradability	Freshwater	Freshwater	Freshwater	Freshwater

Bioscrub® and BioWhite

Natural exfoliants made from polyhydroxybutyrate (PHB). These marine and freshwater biodegradable scrubs are produced from the biofermentation of vegetable sugars. Available in uncolored and white versions, and in a variety of particle sizes. Worldwide approval except China.

Properties	Bioscrub 20PC 🧭	Bioscrub 50PC 🤡	Bioscrub 80PC	Bioscrub 100PC
INCI Name	Polyhydroxybutyrate	Polyhydroxybutyrate	Polyhydroxybutyrate	Polyhydroxybutyrate
Particle Shape	Irregular	Irregular	Irregular	Irregular
Color	Light Tan	Light Tan	Light Tan	Light Tan
Melting Point (°C)	170-180	170-180	170-180	170-180
Density @25°C (g/cc)	1.25	1.25	1.25	1.25
Maximum Particle Size (mesh)	20	50	80	100
Maximum Particle Size (µm)	840	297	180	150
Biodegradability	Freshwater/Marine	Freshwater/Marine	Freshwater/Marine	Freshwater/Marine

Properties	BioWhite 20PC	BioWhite 50PC
INCI Name	Polyhydroxybutyrate/ Titanium Dioxide Blue 1 Lake Ethylene Distearamide	Polyhydroxybutyrate/ Titanium Dioxide Blue 1 Lake Ethylene Distearamide
Particle Shape	Irregular	Irregular
Color	White	White
Melting Point (°C)	170-180	170-180
Density @25°C (g/cc)	1.37	1.37
Maximum Particle Size (mesh)	20	50
Maximum Particle Size (µm)	840	297
Biodegradability	Freshwater/Marine	Freshwater/Marine



EXFOLIANTS

Ecoscrub®

Naturally derived exfoliants made from polylactic acid (PLA). Available in a variety of particle sizes. Colored grades also available on a made-to-order basis. Worldwide approval except China.

Properties	Ecoscrub 1435PC ✓	Ecoscrub ⊘ 20PC	Ecoscrub 40PC	Ecoscrub 🗸	Ecoscrub 80PC	Ecoscrub Ø
INCI Name	Polylactic Acid	Polylactic Acid	Polylactic Acid	Polylactic Acid	Polylactic Acid	Polylactic Acid
Particle Shape	Irregular	Irregular	Irregular	Irregular	Irregular	Irregular
Color	White	White	White	White	White	White
Melting Point (°C)	150-160	150-160	150-160	150-160	150-160	150-160
Density @25°C (g/cc)	1.23-1.25	1.23-1.25	1.23-1.25	1.23-1.25	1.23-1.25	1.23-1.25
Maximum Particle Size (mesh)	14	20	40	50	80	100
Maximum Particle Size (µm)	1410	840	420	297	180	150
Biodegradability	Compostable	Compostable	Compostable	Compostable	Compostable	Compostable

Naturebead®

Spherical exfoliants derived from a variety of natural waxes that provide gentle exfoliation. While not a "breaking bead", Naturebead G20 can be rubbed into the skin. Worldwide approval.

Properties	Naturebead B20	Naturebead G20	Naturebead J20	Naturebead R20 ⊗	Naturoboad C1/I
INCI Name	Copernicia Cerifera (Carnauba) Wax Beeswax	Cetyl Esters Oryza Sativa (Rice) Bran Wax Olea Europaea (olive) fruit oil	Copernicia Cerifera (Carnauba) Wax Beeswax Jojoba Esters	Oryza Sativa (Rice Bran Wax	Oryza Sativa (Rice) Bran Wax/ Theobroma Cacao (cocoa) seed butter
Particle Shape	Spherical	Spherical	Spherical	Spherical	Spherical
Color	Off-White to Light Yellow	Off-White	Off-White to Light Yellow	Off-White	Off-White to Light Yellow
Melting Point (°C)	71-77	45-53	74-79	70-77	72-76
Density @25°C (g/cc)	0.92	0.94	0.93	0.99	0.98
Maximum Particle Size (mesh)	20	20	20	20	14
Maximum Particle Size (µm)	840	840	840	840	1410
Biodegradability	Not tested	Not tested	Not tested	Freshwater	Not tested

Naturebead Colors

Permanently colored spherical exfoliants derived from biodegradable *Oryza sativa* (Rice) bran wax that provide unique visual effects. Naturebead Cocoa C20 has a rich, natural brown color with no added pigments or dyes. *Worldwide approval*.

Properties	Naturebead Cocoa C20	NatureBrown 20RS	NatureBlue 20RS	NatureGreen 20RS	NatureRed 20RS
INCI Name	Copernicia Cerifera (Carnauba) Wax	Oryza Sativa (Rice) Bran Wax Caprylic/Capric Tryglycerides Yellow 5 Lake Red 7 Lake Titanium Dioxide Iron Oxides	Oryza Sativa (Rice) Bran Wax Blue 1 Lake	Oryza Sativa (Rice) Bran Wax Chromium Hydroxide Green	Oryza Sativa (Rice) Bran Wax Red 40 Lake
Particle Shape	Spherical	Spherical	Spherical	Spherical	Spherical
Color	Brown	Brown	Blue	Green	Red
Melting Point (°C)	83-86	70-77	70-77	70-77	70-77
Density @25°C (g/cc)	0.99	0.99	0.99	0.99	0.99
Maximum Particle Size (mesh)	20	20	20	20	20
Maximum Particle Size (µm)	840	840	840	840	840
Biodegradability	Freshwater/Marine	Freshwater	Freshwater	Freshwater	Freshwater





EXFOLIANTS

Synscrub

Economical exfoliants derived from biodegradable synthetic wax, offered in both irregular and spherical shapes for different scrub performance. Our best synthetic alternative to polyethylene plastic microbeads. Worldwide approval.

Properties	Synscrub 1435PC	Synscrub 20PC	Synscrub 35PC	Synscrub 50PC	Synscrub 80PC	Synscrub 100PC
INCI Name	Synthetic Wax	Synthetic Wax	Synthetic Wax	Synthetic Wax	Synthetic Wax	Synthetic Wax
Particle Shape	Irregular	Irregular	Irregular	Irregular	Irregular	Irregular
Color	White	White	White	White	White	White
Melting Point (°C)	108-113	108-113	108-113	108-113	108-113	108-113
Density @25°C (g/cc)	0.95	0.95	0.95	0.95	0.95	0.95
Minimum Particle Size (mesh)	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Particle Size (mesh)	14	20	35	50	80	100
Maximum Particle Size (µm)	1410	840	500	297	180	150
Biodegradability	Freshwater	Freshwater	Freshwater	Freshwater	Freshwater	Freshwater

Properties	Synscrub 164S	Synscrub 164SF
INCI Name	Synthetic Wax	Synthetic Wax
Particle Shape	Spherical	Spherical
Color	White	White
Melting Point (°C)	108-113	108-113
Density @25°C (g/cc)	0.95	0.95
Minimum Particle Size (mesh)	40	80
Maximum Particle Size (mesh)	20	40
Maximum Particle Size (µm)	840	420
Biodegradability	Freshwater	Freshwater



Synscrub Colors

Permanently colored, bleed-resistant spherical exfoliants derived from biodegradable synthetic wax that provide unique visual effects. Worldwide approval.

Properties	Synscrub 164BLS (Blue)	Synscrub 164BRS (Brown)	Synscrub 164RS (Red)	Synscrub 164GRS (Green)	Synscrub 164BKS (Black)	Synscrub 200GRS (Green)	Synscrub Berry 3060S (Deep Pink)
INCI Name	Synthetic Wax Blue 1 Lake	Synthetic Wax Caprylic/Capric Tryglycerides Yellow 5 Lake Red 7 Lake Titanium Dioxide Iron Oxides	Synthetic Wax Red 30 Lake	Synthetic Wax Chromium Hydroxide Green	Synthetic Wax/ Cocos Nucifera (coconut) oil Blue 1 Lake/Red 40 Lake/Yellow 6 Lake Lecithin	Synthetic Wax Blue 1 Lake Yellow 5 Lake	Synthetic Wax Red 33 Lake Red 7 Lake Caprylic/Capric Triglycerides
Particle Shape	Spherical	Spherical	Spherical	Spherical	Spherical	Spherical	Spherical
Color	Blue	Brown	Red	Green	Black	Green	Deep Pink
Melting Point (°C)	108-113	108-113	108-113	108-113	108-113	108-113	108-113
Density @25°C (g/cc)	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Minimum Particle Size (mesh)	40	40	40	40	40	40	60
Maximum Particle Size (mesh)	20	20	20	20	20	20	30
Maximum Particle Size (µm)	840	840	840	840	840	840	590
Biodegradability	Freshwater	Freshwater	Freshwater	Freshwater	Freshwater	Freshwater	Freshwater

Microscrub®

Polyethylene exfoliants offered in a variety of sizes. Colored grades also available on a made-to-order basis.

Properties	Microscrub 1435PC	Microscrub 20PC	Microscrub 35PC	Microscrub 50PC	Microscrub 80PC	Microscrub 100PC
INCI Name	Polyethylene	Polyethylene	Polyethylene	Polyethylene	Polyethylene	Polyethylene
Particle Shape	Irregular	Irregular	Irregular	Irregular	Irregular	Irregular
Color	White	White	White	White	White	White
Melting Point (°C)	125-135	125-135	125-135	125-135	125-135	125-135
Density @25°C (g/cc)	0.93	0.93	0.93	0.93	0.93	0.93
Maximum Particle Size (mesh)	14	20	35	50	80	100
Maximum Particle Size (µm)	1410	840	500	297	180	150

WAX DISPERSIONS

Gelspersions

Very unique semi-solid gels of ultrafine wax powders, while anhydrous, are not greasy or sticky. They can be added to existing formulations to elevate select aesthetics in a formulation, or used as provided. Available in two versions:

- GelMatte 511 (based on Mattewax 511) for increased mattifying with powdery aesthetics
- GelCream 114S (based on Microease 114S) for noticeably improved creaminess

Worldwide approval.

Properties	GelMatte 511	GelCream 114S
Dry Wax Used	Mattewax 511	Microease 114S
INCI Name	Polypropylene Isohexadecane Polyamide-8 Polyhydroxystearic Acid	Synthetic Wax Isohexadecane Polyamide-8 Polyhydroxystearic Acid
Particle Shape	Irregular	Spherical
Appearance	Milky Gel	Milky Gel
Wax Solids	40.0%	32.0%
Viscosity @25°C	30,000 - 60,000 P	70,000 – 110,000 P
Density @25°C (g/cc)	0.82	0.82
Wax Mean Particle Size (µm)	10.0-15.0	6.0-8.0



MELTING WAXES

Prill or coarse powder waxes for rheological modification and structure, with reduced syneresis for use in solid anhydrous sticks, balms, and butters. Worldwide approval.

Properties	Micropoly 204	Microease 1132	Micropoly 4039	Micropoly 4049
INCI Name	Synthetic Wax	Synthetic Wax/Microcrystalline Wax	Polyethylene	Polyethylene
Appearance	White Pellet	White Pellet	White Pellet	Coarse White Powder
Melting Point (°C)	68-77	83-89	99-103	99-103
Density @25°C (g/cc)	0.89	0.94	0.91	0.91
Color	Saybolt $+10/+30$	N/A	60 Klett max.	60 Klett max.

NATURAL PRODUCT SUSTAINABILITY GUIDE

	COSME	SO 16128 TIC GUID	Approved by ECOCERT RAW MATERIAL	Approved by ECOCERT RAW MATERIAL	
PRODUCT	NATURAL INDEX	NATURAL ORIGIN INDEX	ORGANIC INDEX	COSMOS APPROVED	COSMETICS
Bioscrub Series	0	1	0		\otimes
Ecoscrub Series	0	1	0		\otimes
Ecosoft 608 Ecosoft 608XF	0	1	0		\otimes
Microcare 350	1	1	1	*	
Naturebead R20	1	1	0		\otimes
Naturescrub C Series	1	1	1	*	
Naturescrub H Series	0	1	0	*	
Naturesoft 810	1	1	0	*	
Naturesoft 860R	1	1	0	*	7.00



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High Performance Wax Additives





About MPI

For reliable quality and superb consistency in wax additives, formulators rely on Micro Powders, the recognized leader in advanced wax technology. Our specialty products meet the demanding requirements of diverse markets, from paints, coatings and printing inks to ceramics, lubricants, adhesives and more.

Our extensive range of micronized waxes, wax dispersions and wax emulsions brings the right solution to a vast array of applications, with reliable batch-to-batch consistency and superior performance values.

Ongoing innovation keeps Micro Powders ahead of the curve in responding to industry trends. R&D takes place in our advanced applications lab, staffed by chemists with many years experience in the industries we serve.

The Micro Powders quality assurance system is certified to ISO 9001. Along with our technical expertise comes dedicated partnership support from our knowledgeable distributors worldwide and our own staff experts. Our advanced technology will make a quality difference in your products, and your profits.



Unique Products

Laser Diffraction Analysis ensures consistent particle size uniformity from batch-to-batch. Our wax additives are easily dispersed without prior melting or grinding. Product groups include:

MP Synthetic Waxes for lubricity and economy

MPP Polyethylene Waxes for rub and mar resistance

Fluo PTFE (Polytetrafluoroethylene) Waxes for high slip, mar and heat resistance

PropylMatte / AquaMatte® / MicroMatte® Waxes for uniform matting and scratch resistance

Micropro Waxes for anti-blocking and gloss control

Polyfluo® / Synfluo Waxes for slip and abrasion resistance

Polysilk® Waxes for improved slip, tape release and smooth surface

Superslip / Synslip / SuperGlide Waxes for high lubricity without PTFE

MicroKlear Waxes for abrasion resistance with gloss retention and clarity

Wax Emulsions for water repellency and moisture resistance

Aqua Waxes for all water based applications

Microspersion® Wax Dispersions "stir-in" wax dispersions

PropylTex® Waxes for texture and gloss control

NyloTex Waxes high melt point texture additives

AquaTex® Waxes texture and gloss control in water based systems

MicroTouch Products soft touch additives

Special-Effects Products for visual effects





High Performance Wax Additives

Advanced technology with a quality difference

MP Synthetic Waxes

Straight chain, fully saturated synthetic hydrocarbon waxes produced by the Fischer-Tropsch process. These products provide extra slip, scratch and rub resistance. They are effective and economical in most ink, paint and coating systems.

Typical Properties	MP-22 🌢	MP-22VF	MP-22XF	MP-22XXF	MP-22C	MP-28C	MP-28XF	
Melting Point °C	102-106	102-106	102-106	102-106	102-106	104-110	104-110	
Density at 25 °C (g/cc)	0.93	0.93	0.93	0.93	0.93	0.95	0.95	
NPIRI Grind	4.0-6.0	2.0-3.5	1.5-3.0	1.0-2.0	2.0-3.0	1.5-3.0	1.5-3.0	
Maximum Particle Size (μm)	31.0	22.0	22.0	15.56	22.0	22.0	22.0	
Mean Particle Size (µm)	7.0-10.0	6.0-8.0	4.5-6.5	3.75-5.75	6.0-8.0	4.5-6.5	4.5-6.5	

MPP Polyethylene Waxes

Formulated to provide maximum rub and mar resistance, gloss retention and anti-block properties. Our polyethylene grades are versatile, with excellent recoatability, and allow higher processing temperatures than synthetic waxes. MPP-611AL is an ultrafine HDPE/nano alumina composite that provides superior scratch resistance with lubricity. MPP-123AL is an LDPE/nano alumina composite ideal for maximizing scratch resistance and surface durability, and is suitable for non-slip surfaces.

Typical Properties	MPP-230F 🌢	MPP-230VF	MPP-611 •	MPP-611XF 🌢	MPP-611AL	MPP-620F	MPP-620VF 🌢	MPP-620XF	MPP-620XXF
Melting Point °C	110-118	110-118	109-115	109-115	109-115	114-116	114-116	114-116	114-116
Density at 25 °C (g/cc)	0.94	0.94	0.96	0.96	0.99	0.96	0.96	0.96	0.96
NPIRI Grind	4.0-5.5	3.0-4.0	2.0-3.0	1.0-2.0	1.0-2.0	4.0-5.0	2.0-3.0	1.0-2.0	1.0-1.5
Maximum Particle Size (μm)	31.0	26.0	22.0	22.0	15.56	31.0	22.0	22.0	12.0
Mean Particle Size (μm)	10.0-12.0	7.0-9.0	5.0-8.0	4.0-6.0	3.5-5.5	7.0-9.0	5.0-7.0	4.5-5.5	4.25-4.75

Typical Properties	MPP-635G	MPP-635F •	MPP-635VF	MPP-635XF	MPP-1241	MPP-123	MPP-123AL
Melting Point °C	123-125	123-125	123-125	123-125	123-126	110-113	110-113
Density at 25 °C (g/cc)	0.97	0.97	0.97	0.97	0.97	0.93	0.97
NPIRI Grind	6.0-8.0	4.0-5.0	2.0-3.0	1.0-2.5	N/A	4.0-6.0	4.0-6.0
Maximum Particle Size (μm)	31.0	31.0	22.0	22.0	110.0	31.0	31.0
Mean Particle Size (μm)	11.0-13.0	8.0-10.0	6.0-8.0	4.0-6.0	20.0-25.0	9.5-12.5	9.5-12.5

Fluo PTFE Waxes

Often used in combination with micronized waxes to achieve higher surface lubricity, anti-blocking properties and lower cost. Our micronized PTFE (polytetrafluoroethylene) products are heat resistant and insoluble. Fluo 625F is a coarser grade of micronized high molecular weight PTFE that provides mild texture with superior abrasion and temperature resistance. Fluo 625F-H and Fluo 750TX are special PTFE grades that provide various texture effects in powder coatings. MicroTex 121 is a combination of PTFE and polyethylene that provides uniform texturing and abrasion resistance in powder coatings. Fluo X-1406 contains clusters of sub-micron particles which provide maximum lubricity in inks and coatings.

Typical Properties	Fluo HT 🌢	Fluo HTI-2	Fluo 300	Fluo 300XF	Fluo 625F
Melting Point °C	>316	>316	>316	>316	>316
Density at 25 °C (g/cc)	2.2	2.2	2.2	2.2	2.2
NPIRI Grind	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	N/A
Maximum Particle Size (μm)	12.0	15.56	22.0	15.56	44.0
Mean Particle Size (μm)	2.0-4.0	3.0-5.0	5.0-6.0	2.0-4.0	9.0-13.0
Typical Properties	Fluo 750TX	Fluo 625F-H	MicroTex® 121	Fluo X-1406 🌢	
Melting Point °C	>325	>316	110 – 118	>316	
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Density at 25 °C (g/cc)	2.2	2.2	1.02	2.2	
NPIRI Grind	N/A	N/A	N/A	N/A	
Maximum Particle Size (μm)	145.0	44.0	N/A	22.0	
Mean Particle Size (um)	20.0-30.0	13.0-21.0	<100	4.0-6.0 (<0.3 prir	mary)

Available as a water based dispersionNatural or naturally derived

Polyfluo® Waxes

Unique composites of polyethylene waxes and PTFE that provide a high degree of surface lubricity, abrasion resistance and film toughness. These proprietary formulations offer a synergistic combination of properties for superior formulation flexibility in inks, paints, and coatings. Polyfluo 900 is an LDPE/PTFE composite fortified with ceramic beads for improved burnish and abrasion resistance. Polyfluo 523AL is an HDPE/PTFE composite reinforced with alumina nanopowder for maximum scratch, mar, and scuff resistance.

Typical Properties	Polyfluo 120	Polyfluo 150 🌢	Polyfluo 150	XF Polyflu	io 190 🌢 Pi	olyfluo 190S	Polyfluo 200	Polyfluo 400 🌢
Melting Point °C	107-110	113-116	113-116	121-13	32 1.	21-132	124-126	108-115
Density at 25 °C (g/cc)	0.98	1.04	1.04	0.98	0.	.98	1.02	1.21
NPIRI Grind	3.0-5.0	1.0-2.0	1.0-2.0	3.5-5.5	3.	.0-4.0	3.0-5.0	1.0-2.0
Maximum Particle Size (μm)	31.0	15.56	11.0	31.0	3	1.0	31.0	22.0
Mean Particle Size (µm)	6.0-10.0	3.5-5.5	3.0-5.0	9.0-12.	.0 6.	.5-8.5	9.0-11.0	5.0-6.0
Typical Properties	Polyfluo 400XF	Polyfluo 523XF 🌢	Polyfluo 523AL	Polyfluo 535	Polyfluo 535XF	Polyfluo 540	Polyfluo 540XF	Polyfluo 900 🌢
Typical Properties Melting Point °C	Polyfluo 400XF 108-115	Polyfluo 523XF • 113-117	Polyfluo 523AL 113-117	Polyfluo 535 108-115	Polyfluo 535XF 108-115	Polyfluo 540 108-115	Polyfluo 540XF 108-115	Polyfluo 900 • 121-132
71 T		*				, , , , , , , ,	,	
Melting Point °C	108-115	113-117	113-117	108-115	108-115	108-115	108-115	121-132
Melting Point °C Density at 25 °C (g/cc)	108-115 1.21	113-117 1.10	113-117 1.09	108-115 1.04	108-115 1.04	108-115 1.05	108-115 1.05	121-132 1.02

Synfluo Waxes

Special combinations of synthetic wax and PTFE designed to impart high levels of surface lubricity and scratch resistance to printing inks, paints and coatings. Synfluo is especially recommended for use in high gloss lacquers, can and coil coatings, as well as powder coatings. Synfluo 283TX is an ideal texture effect additive for powder coatings.

Typical Properties	Synfluo 168VF	Synfluo 171VF	Synfluo 172VF	Synfluo 172XF	Synfluo 178VF	Synfluo 178XF	Synfluo 180VF	Synfluo 180XF	Synfluo 283TX
Melting Point °C	104-110	104-110	104-110	104-110	104-110	104-110	104-110	104-110	104-110
Density at 25 °C (g/cc)	0.95	0.96	0.97	0.97	0.98	0.98	1.02	1.02	1.01
NPIRI Grind	4.0-5.0	2.0-3.0	1.5-3.0	1.0-2.5	1.5-3.0	1.0-2.0	1.5-3.0	1.0-2.0	4.5-6.5
Maximum Particle Size (µm)	31.11	22.0	22.0	18.5	22.0	15.56	22.0	11.0	31.0
Mean Particle Size (µm)	8.0-10.0	4.0-7.0	4.0-7.0	3.5-6.25	4.0-7.0	3.0-5.0	4.0-7.0	3.0-5.0	8.5-10.5

Polysilk® Waxes

Unique combinations of low molecular weight fatty waxes on a backbone of polyethylene. Polysilk is designed to bloom and provide excellent surface slip without the use of silicone. These additives give excellent tape release and anti-blocking with scuff and mar resistance in solvent and water based systems. Polysilk 14 and Polysilk 600 contain PTFE for added toughness and slip.

Typical Properties	Polysilk 14	Polysilk 600	Polysilk 750
Melting Point °C	96-118	96-109	96-109
Density at 25 °C (g/cc)	1.02	1.02	0.94
NPIRI Grind	3.5-4.5	2.0-3.0	2.0-3.0
Maximum Particle Size (μm)	31.0	22.0	22.0
Mean Particle Size (µm)	7.5-9.5	5.0-7.0	5.0-7.0

MicroKlear Waxes

Formulated with prime #1 yellow refined carnauba wax. MicroKlear grades are ideally suited where excellent slip, gloss and clarity are required. MicroKlear 116 and 295 are combinations of polyethylene and carnauba. MicroKlear 418 is 100% carnauba wax. MicroKlear 418AL is an ultrafine carnauba wax/nano alumina composite that provides superior scratch resistance with lubricity, gloss and film clarity.

Typical Properties Melting Point °C	MicroKlear 116 107-113	MicroKlear 295 ◆ 104-110	MicroKlear 418 ♦ Ø 81-86	MicroKlear 418AL Ø 81-86
Density at 25 °C (g/cc)	0.98	0.98	1.00	1.04
NPIRI Grind	1.5-2.5	2.0-3.0	2.0-3.5	2.0-3.5
Maximum Particle Size (μm)	15.56	22.0	22.0	22.0
Mean Particle Size (μm)	4.0-5.25	4.0-6.0	6.0-8.0	6.0-8.0

Micropro Waxes

Modified polypropylene waxes characterized by higher melt points and toughness. These products exhibit excellent surface slip, mar resistance, anti-blocking and gloss control, while improving metal marking resistance. They are useful for suspending silica additives and provide a non-abrasive smooth surface. Micropro 440W is specifically formulated for easy incorporation in water based systems.

Typical Properties	Micropro 200	Micropro 400	Micropro 440W 🌢	Micropro 500	Micropro 600	Micropro 600VF
Melting Point °C	140-143	140-143	150-156	141-143	146-149	146-149
Density at 25 °C (g/cc)	0.95	0.94	0.97	0.95	0.95	0.95
NPIRI Grind	3.0-5.0	2.0-3.5	3.0-5.0	2.0-3.5	3.0-4.0	2.0-3.5
Maximum Particle Size (μm)	31.0	22.0	31.0	22.0	22.0	22.0
Mean Particle Size (µm)	6.0-11.0	4.5-7.5	7.0-10.0	4.5-7.5	6.0-9.0	5.0-8.0

PropylMatte Waxes

These grades provide uniform and efficient gloss reduction with optimum resistance to burnishing. PropylMatte 31, 450, and 500 are produced from 100% polypropylene and provide consistent matting with minimal effect on viscosity. PropylMatte 31HD is a high density version modified for optimal in-can stability in water based systems. PropylMatte 31SA is modified with PTFE for improved slip, lubricity and abrasion resistance.

Typical Properties	PropylMatte 31	PropylMatte 31HD •	PropylMatte 31SA 🌢	PropylMatte 450	PropylMatte 500
Melting Point °C	160-170	160-170	160-170	142-148	142-148
Density at 25 °C (g/cc)	0.89	1.07	1.02	0.90	0.90
NPIRI Grind	5.0-6.0	5.0-6.0	5.0-6.0	5.0-6.0	2.0-3.5
Maximum Particle Size (μm)	31.0	31.0	31.0	31.0	22.0
Mean Particle Size (um)	8.0-12.0	8.0-12.0	8.0-12.0	8.0-12.0	5.0-8.0

AquaMatte® and MicroMatte Waxes

AquaMatte products are high density oxidized polyolefins designed for ease of dispersability and stability in all water based systems. MicroMatte 1011 UVW and MicroMatte 1213 UVW are specially modified waxes incorporating microencapsulated inorganics to eliminate flotation, for enhanced stability in water based and UV systems. MicroMatte 2000 is a hybrid polypropylene that reduces gloss while maintaining excellent clarity.

Typical Properties	AquaMatte 22 🌢	AquaMatte 26HD	AquaMatte 31 🌢		MicroMatte 1011 UVW	MicroMatte 1213 UVW 🌢	MicroMatte 2000
Melting Point °C	135-140	105-111	135-140	-	150-156	150-156	146-149
Density at 25 °C (g/cc)	0.99	1.08	0.99		1.07	1.07	0.96
NPIRI Grind	2.0-3.0	3.0-4.0	5.0-6.0	:	2.0-3.5	2.0-3.5	2.0-4.0
Maximum Particle Size (μm)	22.0	26.0	31.0		22.0	22.0	22.0
Mean Particle Size (μm)	6.0-8.0	6.0-8.5	8.0-12.0	:	5.0-7.5	5.0-7.5	6.0-9.0

Superslip, Synslip and SuperGlide Waxes

Combinations of polyolefins and amides designed to impart increased lubricity, scratch resistance and anti-blocking without the use of PTFE. They also impart an excellent "feel" or smoothness to a coating.

Typical Properties	Superslip 6515	Superslip 6515XF	Superslip 6530	Synslip 3750	Synslip 3780	SuperGlide 904
Melting Point °C	124-137	124-137	124-135	135-143	135-143	138-145
Density at 25 °C (g/cc)	0.96	0.96	0.97	0.94	0.95	0.96
NPIRI Grind	2.0-3.0	1.0-2.0	2.0-3.5	2.0-3.5	2.0-4.0	2.0-4.0
Maximum Particle Size (μm)	22.0	15.56	22.0	22.0	22.0	22.0
Mean Particle Size (μm)	6.0-8.0	4.0-6.0	6.0-7.5	5.0-7.0	5.0-8.0	4.0-7.0

Micromide Waxes

Finely micronized vegetable derived EBS waxes. Our Micromide grades feature extremely fine particle size control with excellent blooming properties. These waxes provide surface slip, scratch and mar resistance as well as some gloss control.

Typical Properties	Micromide 520 🌢 🥒	Micromide 520XF 🥒
Melting Point °C	141-145	141-145
Density at 25 °C (g/cc)	0.97	0.97
NPIRI Grind	1.5-3.0	1.0-2.0
Maximum Particle Size (μm)	22.0	15.56
Mean Particle Size (μm)	5.0-8.0	3.0-5.0

AquaBead® Waxes

Finely micronized wax polymers specifically formulated to produce a water "beading" effect. These unique powder compositions combine the synergistic properties of several waxes to produce immediate, consistent and long-lasting water beading and weather resistance.

Typical Properties	AquaBead 519 🌢	AquaBead 916
Softening Point °C	60-63	64-67
Melting Point °C	126-132	128-132
Density at 25 °C (g/cc)	0.94	0.95
NPIRI Grind	2.0-3.0	1.5-2.5
Maximum Particle Size (μm)	22.0	22.0
Mean Particle Size (μm)	6.0-8.0	7.0-9.0

Aqua Waxes

Specifically modified for easy incorporation and stability in water based inks, paints and coatings. Aquawax 214 and Aquawax 214VF are hard, high melt point micronized synthetic waxes. AquaPoly 215 grades are economical polyethylene waxes. AquaPoly 250 is a hard, high density and high molecular weight polyethylene polymer that imparts excellent scratch, rub and mar resistance, while reducing potential wax defoamer kickout. AquaPolyfluo 411 and AquaPolysilk 19 contain PTFE for increased lubricity and scratch resistance. AquaSuperslip 6550 imparts maximum lubricity and block resistance.

Typical Properties	Aquawax 214 🌢	Aquawax 214VF	AquaPoly 215 🌢	AquaPoly 250 🌢	AquaPolyfluo 411 🌢	AquaPolysilk 19 🌢	AquaSuperslip 6550 🌢
Melting Point °C	98-102	98-102	105-111	117-123	117-123	102-118	124-135
Density at 25 °C (g/cc)	0.96	0.96	0.94	0.97	1.02	1.02	0.97
NPIRI Grind	4.0-6.0	2.0-3.5	5.0-6.0	4.0-5.0	2.5-3.5	3.5-4.5	2.0-3.5
Maximum Particle Size (μm)	31.0	22.0	31.0	31.0	22.0	31.0	22.0
Mean Particle Size (μm)	9.0-11.0	5.0-7.5	9.0-11.0	8.0-10.0	6.0-8.0	9.0-11.0	5.0-7.5

Wax Emulsions

Sub-micron aqueous emulsions formulated using a combination of waxes. The AquaBead grades are designed to produce a water beading effect as well as long-lasting water repellency in aqueous paints, stains, and coatings. The AquaKlean grades provide excellent scrubbability and burnish resistance in architectural interior and exterior wall paints, coatings, stains, and sealers.

Microspersion 91E is a polypropylene emulsion designed to increase COF in water based floor finishes, inks, and OPV's. Microspersion 504E is a large particle size PE emulsion for aqueous inks and coatings. Microspersion 526E is a high melt point PE emulsion that provides optimum surface protection while maintaining excellent gloss and film clarity. Microspersion 530E is a PE emulsion with broad FDA compliance for food packaging applications.

Typical Properties	AquaBead 270E	AquaBead 325E	AquaBead 425E 🥒	AquaBead 525E		
Emulsifier Type	Anionic	Anionic	Anionic	Anionic		
Wax Type	Paraffin/polyethylene	Paraffin	Carnauba wax	Paraffin/carnauba wax		
Melting Point °C	60	54	85	60		
Solids	40.0%	63.0%	25.0%	30.0%		
Viscosity at 25°C (cP)	500-1300	1000-2000	<200	100-800		
pH	9.0-11.0	8.0-10.0	10.0-11.0	10.0-11.0		
Typical Properties	AquaKlean 403	AquaKlean 418 🥒	Microspersion 91E	Microspersion 504E	Microspersion 526E	Microspersion 530E
Emulsifier Type	Anionic	Anionic	Nonionic	Nonionic	Anionic	Anionic
Wax Type	Polyethylene/paraffin	Carnauba wax	Polypropylene	Polyethylene/paraffin	Polyethylene	Polyethylene
Melting Point °C	120	85	160	100	140	125
Solids	30.0%	50.0%	40.0%	40.0%	25.0%	35%
Viscosity at 25°C (cP)	<200	<50	20-150	<500	<50	<100
pH	9.0-10.0	4.0-8.0	8.5-9.5	7.5-9.5	9.5-10.5	9.0-10.5

Microspersion® Wax Dispersions

Viscosity at 25°C (cP)

Mean Particle Size (µm) 5.0-8.0

1000-2000

3.5-5.5

3000-5000

5.0-7.0

Aqueous nonionic dispersions of Micro Powders micronized waxes. Designed for ease of incorporation and optimum performance, the Microspersion grades enable the use of highly efficient micronized waxes in a liquid form. The products listed below include some of our more popular grades. For a complete listing visit our website. Microspersion EZ is an advanced wetting and dispersing agent for water based systems.

Typical Properties	Microspersion 19	Microspersion 22-50	Microspersion 31HD-40	Microspersion 190-30	Microspersion 215-50	Microspersion 250-50	Microspersion 411-50	Microspersion 440W
Dry Wax ID	Aquapolysilk 19	MP-22	PropylMatte 31HD	Polyfluo 190	AquaPoly 215	AquaPoly 250	AquaPolyfluo 411	Micropro 440W
Wax Solids	25.0%	50.0%	40.0%	50.0%	50.0%	50.0%	50.0%	40.0%
Resin Type/Solids	Acrylic/12.1%	None	None	None	None	None	None	Acrylic/7.8%
pH	7.0-10.0	9.0-10.5	8.0-9.0	9.0-10.5	7.5-9.0	9.0-10.5	9.0-10.5	7.0-10.0
Viscosity at 25°C (cP)	3000-7000	2500-4500	5000-9000	5000-9000	1500-4000	2000-4000	2000-4000	200-1000
Mean Particle Size (μm)	9.0-11.0	7.0-10.0	8.0-12.0	9.0-12.0	9.0-11.0	N/A	N/A	7.0-10.0
Typical Properties Dry Wax ID	Microspersion 520 Micromide 520	Microspersion 523 Polyfluo 523XF	Microspersion 620-50 MPP-620VF	Microspersion 900-50 Polyfluo 900	Microspersion 930 PE Hybrid	Microspersion 1406 Fluo X-1406	Microspersion HT Fluo HT	Microspersion EZ N/A
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Dry Wax ID	Micromide 520	Polyfluo 523XF	MPP-620VF	Polyfluo 900	PE Hybrid	Fluo X-1406	Fluo HT	N/A
Dry Wax ID Wax Solids	Micromide 520 34.0%	Polyfluo 523XF 40.0%	MPP-620VF 50.0%	Polyfluo 900 50.0%	PE Hybrid 35.0%	Fluo X-1406 50.0%	Fluo HT 50.0%	N/A N/A

1000-2500

N/A

3000-5000

5000-7000

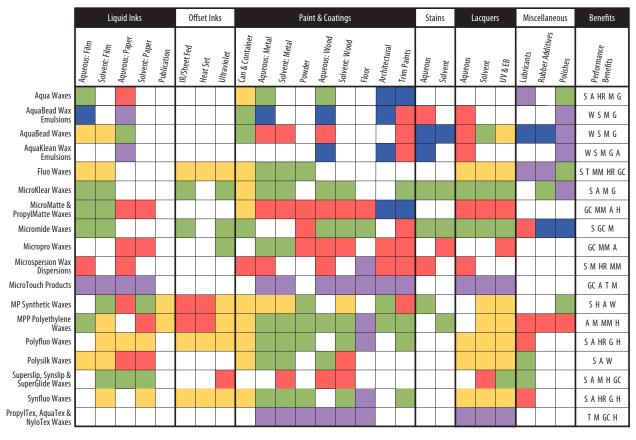
2.0 - 4.0

300-1200 cP

5000-9000

9.0-12.0

What's Your Application?



Addition Level Key: Percentage is based on total formula weight

= 0.25 - 1.0% = 2.0 - 3.0% = 1.0 - 2.0% = Above 3.0% = 1.0 - 3.0%

Benefits Key:

= Slip/Lubricity M = Mar Resistance Α = Abrasion Resistance MM = Metal Marking HR = Heat / Blocking Resistance GC = Gloss Control Н = Hardness G = Gloss Retention = Texture W = Water Repellency



The data contained in this brochure are typical properties and are not to be considered specifications. Please contact Micro Powders directly for official product specifications.



www.micropowders.com

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KAHLWAX

It all started a couple of years after the Second World War in Colope. Mr. Eduzard Huntenburg, owner of a food trading company in Hamburg, was visiting in Seister and her husband in Colope. The two gentlemen went out one night and pinned a group of card players in a shady put. They had probably one or two drinks and in the end Eduzard Huntenburg won some or two drinks and in the end Eduard Huntenbury won some coupons for stack. It was hard to figure out what to do with them. As he was a clever man with good instincts he decided to produce cans from the steel and fill them with shoe polish. He got in touch with Mr. Guldo Kahl, a trader with contacts in the camable was business in Brazil. The two businessmen decided to cooperate and found a company. They used a callier of a homberfor a foroid lorated in Hamburn Botherbursorst of a bombed-out school located in Hamburg Rothenburgsort close to the harbor. They prepared the polish in the boiler and filled it afterwards in cans. Of course it was a success!

We still have this entrepreneurial spirit and flexibility, always eager to find good use for our high quality waxes!



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Kahlwax products are unique due to a specific manufacturing procedure which filters & purifies selected crude materials resulting in iíghly sophísticated, premíum waxes. Discover our product line. QUESTIONS? Send me an e-mail: dr.cera@kahlwax.com

KAHLWAX, THE NATURAL WAX SPECIALIST.

ICONS

MADE OF NATURAL RAW MATERIAL

MADE OF ORGANIC RAW MATERIAL

REE OF ANIMAL-DERIVED RAW MATERIAL

COMPLIES WITH EUROPEAN PHARMACOPOEIA

CHINA COMPLIANT

KOSHER CERTIFIED

HALAL CERTIFIED

SUSTAINABLY HARVESTED

OUR BESTSELLER



PORTFOLIO

IN TUNE WITH NATURE

The wax industry is inevitably linked with nature, as natural waxes are produced by bioorganisms to protect

SUSTAINABILITY

Sustainability comes naturally to KahlWax. Most natural waxes already have huge sustainability potential, as they are made from regrowing sources and are obtained as side-products of other industries. A value chain is created as the crude waxes would be disposed of if they were not used as raw material for our products. As for the other natural waxes, the remaining plant parts or thrust are used for compost and fertilization.



KAHL SPECIALTY WAXES

In the past, many people perceived formulations with waxes as heavy, dull, sometimes sticky, and too occlusive. Therefore, in skin care, waxes were primarily used in cold and barrier in soin care, waxes were primarily used in color and barrier creams and other rich W/O emulsions. Constant innovation and optimization in order to obtain more refined and, for the cosmetic industry, better and more widely applicable and acceptable natural waxes have unlocked many doors for the application of natural waxes in skin care and color cosmetics, however. It is now acknowledged that waxes have cosmetics, however. It is now acknowledged that waves have a much bigger potential! They are very useful because of their virtually innumerable advantageous properties. Besides providing stability, enhancing viscosity and consistency, they form flexible, protective layers, and many of them have a superb, light, soft, and buttery skin feel.

6237 | RAPESEED WAX

Very soft, white, buttery wax with a low peroxide value. Has a creamy consistency and is an ideal alternative to

INCI (EU/USA): Hydrogenated Rapeseed Oil | MP: 36-39 °C

6290 | BERRY WAX

Low melting soft wax with velvet, powdery skin feel. Outstanding pay-off enhancer for stick and pencil preparations. Gives O/W emulsions a moussy, whipped cream type of texture.

INCI (EU): Rhus Verniciflua Peel Cera/Rhus Succedanea Fruit Cera INCI (USA): Rhus Verniciflua Peel Wax/Rhus Succedanea Fruit Wax | MP: 48-54 °C

6279L | MYRICA FRUIT WAX

Lequality*, hard wax with low melting point. Excellent performance as natural hair conditioning agent. Reduces combing force significantly, provides medium hold used in hair styling products. Allows remolabile styles without flaking. Gives luxurious, rich skin feel and prolongs playtime of formulations. Compiles with all provisions of Nagoya protocol of access and benefit sharing.

INCI (EU): Myrica Cerifera Fruit Wax | INCI (USA): Myrica Cerifera (Bayberry) Fruit Wax | MP: 45-55 °C

2811 | RICE BRAN WAX

📾 💿 🧇 🤪

L-quality*, approved as direct and indirect food additive by the FDA (USA) CRF 21 § 172.615 and CRF 21 § 178.3860. Matte wax due to high crystallinity. Provides a soft and creamy texture in emulsions and oleogels.

INCI (EU): Oryza Sativa Bran Cera | INCI (USA): Oryza Sativa (Rice) Bran Wax | MP: 79-85 °C

6240 | VEGETABLE WAX



Soft wax with low melting point, GMO-free quality INCI (EU/USA): Hydrogenated Vegetable Oil | MP: 37-44 °C

* Due to a particular production procedure, all impunities are removed. The wax shows a clear melt and contains < 5 mval/kg peroxides.

KAHLSPECIALTY WAXES | 07

6607L | SUNFLOWER SEED WAX



Very light-colored L-quality*, high oil binding capacity. Reduces stickiness of formulations and creates glossy surfaces. INCI (EU): Helianthus Annuus Seed Cera, Ascorbyl Palmitate, Tocopherol

INCI (USA): Helianthus Annuus (Sunflower) Seed Wax, Ascorbyl Palmitate, Tocopherol | MP: 74–80 °C

6607H | SUNFLOWER HYDROWAX



INCI (EU/USA): Hydrolyzed Sunflower Seed Wax | MP: 65-71 °C



Equality with outstanding volumizing performance in mascaras. Very hydrophobic and adhesive wax supporting transfer resistance and film forming.

INCI (EU): Shellac Cera | INCI (USA): Shellac Wax | MP: 78-84 °C

76860E | HAIR WAX BLEND

Emulsifier-free base for hair styling waxes. Provides strong hold. INCI (EU): Cetyl Palmitate, Cera Alba, Cera Microcristallina | INCI (USA): Cetyl Palmitate, Beeswax, Microcrystalline Wax MP: 78-84 °C

8089 | WEB EFFECT WAX

Creamy white, waxy paste. Compound for elastic hair styling creams for moldable hair style and natural hold. Creates sticky strings in combination with PVP. Suitable for emulsified or anhydrous systems.

INCI (EU): Cera Alba, Ceteareth-25, Oryza Sativa Bran Cera | INCI (USA): Beeswax, Ceteareth-25, Oryza Sativa (Rice) Bran Wax MP: 60=66 °C

6421 | SUPERSOFT ESTER



Animal-free langlin substitute with water absorption capacity of 200 %. Suitable for emulsions and anhydrous systems. INCI (EU/USA): Bis-Diglyceryl Polyacyladipate-2 | MP: 32-37 °C

6422 | VEGGIESOFT COMPLEX



All-natural and vegan alternative to lanolin wax with the same water binding capacity of min. 200 %. Shows similar influence on skin elasticity as lanolin.

INCI (EU): Rhus Verniciflua Peel Cera/Rhus Succedanea Fruit Cera, Simmondsia Chinensis Seed Oil, Cetearyl Alcohol, Myristyl Alcohol, Capryllc/Capric Triglyceride, Copernicia Cerifera Cera, Tocopherol

INCI (USA): Rhus Verniciflua Peel Wax/Rhus Succedanea Fruit Wax, Simmondsia Chinensis (Jojoba) Seed Oil, Cetearyi Alcohol, Myristyi Alcohol, Caprylic/Capric Triglyceride, Copernicia Cerifera (Camauba) Wax, Tocopherol MP: 40-46 °C

5109 | SUNFLOWER + CARNAUBA EMULSIFYING COMPLEX



Pale yellow, waxy pellets. Contains PEG-free O/W emulsifier and can be added to the water phase at 85 °C. To function as the only emulsifier the water phase needs to be thickened by a carbomer or other polymer. Dry and silky skin feel, reduces stickiness of formulations. Lee level 3–5% as co-mulsifier, as so level mulsifier 6–10%.

INCI (EU): Copernicia Cerifera Cera, Helianthus Annuus Seed Cera, Polyglyceryl-10 Oleate

INCI (USA): Copernicia Cerifera (Carnauba) Wax, Helianthus Annuus (Sunflower) Seed Wax, Polyglyceryl-10 Oleate MP: 78-84 °C

5115 | RICE + MYRICA EMULSIFYING COMPLEX



Pale yellow, waxy pellets. Combines the benefits of rice bran and myrica wax and has been designed especially for use in O/W emulsions. Enriches skin feel of formulations. Contains PEG-free O/W emulsifier and can be added to the water phase at 85 °C. Use level 3-5 % as co-emulsifier, as sole emulsifier 6-10%. INCI (EU): Oryza Sativa Bran Cera, Myrica Cerifera Fruit Wax, Cetearyl Glucoside, Cetearyl Alcohol

INCI (USA): Oryza Sativa (Rice) Bran Wax, Myrica Cerifera (Bayberry) Fruit Wax, Cetearyl Glucoside, Cetearyl Alcohol MP: 73-79 °C

08 | KAHLSPECIALTY WAXES * Due to a particular production procedure, all impurities are removed. The wax shows a clear melt and contains <5 mval/kg peroxides. KAHI SPECIALTY WAXES I 09

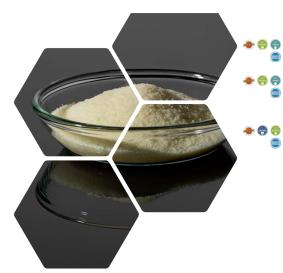
KAHL BEADS

KahlBeads are from sustainable sources and are all truly natural products. They can be considered readily bio degradable and are non-toxic for humans, animals, and the tire environment. No bio-accumulation is to be ex therefore they are harmless for use even in rinse-off products

KahlBeads are spherical particles made of pure, uncolored wax. Due to their round shape KahlBeads are the ideal peeling particles even for sensitive skin. Thanks to their high melting point they are very stable especially in emulsified systems. KahlBeads show the same exfoliating activity as other natural particles which have sharp edges or are known for being easily contaminated. Most grades are certified for natural cosmetics.

KahlBeads should not be added at temperatures >50 °C in

Combine KahlBeads with other exfoliating particles in different shapes and colors to create exciting effects. Strawberry seeds, sugar crystals, and sand grains give the mix a coarse



2178P | CASTOR WAX BEADS

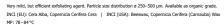
Perfectly round peeling beads. Fine white quality, particle size distribution ø 500 μm. Need to be used <45 °C. INCI (EU/USA): Hydrogenated Castor Oil | MP: 83-89 °C

2811P | RICE BRAN WAX BEADS

Natural peeling beads with temperature stability up to $55\,^{\circ}$ C. Does not irritate skin even when used daily. Particle size distribution a $500\,\mu m$.

INCI (EU): Oryza Sativa Bran Cera | INCI (USA): Oryza Sativa (Rice) Bran Wax | MP: 79-85 °C

7625P | CARNAUBA + BEESWAX BEADS







KahDellies are homogeneous and temperature-stable, certified for natural/organic cosmetics, and China compliant.

7036PLUS | VEGO JELLY

Vega and hatural petrolatum alternative based on berry wax. Unique blend of natural waxes and oils with super soft, silky lip and skin feel, and high oil binding capacity. Has a positive influence on TEVM.

feel, and high oil binding capacity. Has a positive influence on TEWL.
INCI (EU): Ricinus Communis Seed Oil, Rhus Verniciflua Peel Cera/Rhus Succedanea Fruit Cera, Ascorbyl Palmitate, Tocopherol
INCI (USA): Ricinus Communis (Castor) Seed Oil, Rhus Verniciflua Peel Wax/Rhus Succedanea Fruit Wax, Ascorbyl Palmitate, Tocopherol

7235 | NATURAL JELLY

MP: 42-48 °C

Natural petrolatum alternative with beeswax and camauba wax. Easy to emulsify and compatible with polar emollients. Forms a permeable, protective film on skin, and reduces TEWL.

INCI (EU): Ricinus Communis Seed Oll, Cera Alba, Copernicia Cerifera Cera, Ascorbyl Palmitate, Tocopherol
INCI (USA): Ricinus Communis (Castor) Seed Oll, Beeswax, Copernicia Cerifera (Carnauba) Wax, Ascorbyl Palmitate, Tocopherol
MP: SS-52 °C

7236 | ORGANIC JELLY

Opaque thixotropic jelly. Organic certified petrolatum alternative with beeswax and carnauba wax. Forms a permeable, protective film on skin, and reduces TEWL.

INCI (EU): Ricinus Communis Seed Oil, Cera Alba, Copernicia Cerifera Cera, Ascorbyl Palmitate, Tocopherol

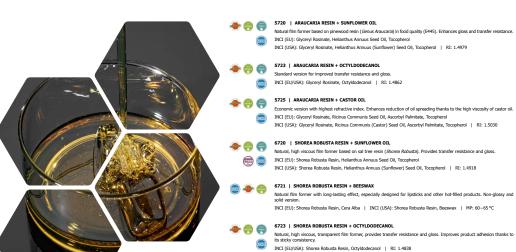
INCI (USA): Ricinus Communis (Castor) Seed Oil, Beeswax, Copernicia Cerifera (Carnauba) Wax, Ascorbyl Palmitate, Tocophero MP: 55-62 °C

14 | KAHDELLIES | 15

KAHLRESINS

Kahlikesins are the ideal gloss enhancer for color cosmetics and hair styling products. They are natural polybutene alternatives bootship the transfer resistance of any kind of formutation, and reduce spreading. Used in lipsticts they improve adhesion and pay-off. Depending on the fallifection grade they are crystal clear/orgaue, golden yellow, symp-like liquids, forming a flexible film. As the film does not dry on sight-hair, almost like honey, they cannot cause flaking.

The Araucaria resins are tasteless, and the blend with organic sunflower seed oil even has food quality (E445).



KAHLRESINS KAHLRESINS

KAHLBASES

KahlBases are made for your convenience! Depending on the KahlBase type they can be used as sole base for lipstick or lip care formulations or as part of the composition blended with oils, pigments, fillers, and stabilizing additives.

KahlBases are all-in-one solutions for easy prod processes and only require melting, blending with other ingredients if desired, and pouring into desired molds. All KahlBase grades create high gloss and have excellent heat

4077 | NATURAL LIPSTICK BASE 🦱 🧆



6465 | LIPSTICK BASE

Colorless wax and oil blend for lipsticks with high gloss and excellent heat resistance. Only pigments, fillers, and stabilizing additined to be added.

INCI (EU): Cera Microcristallina, Paraffinum Liquidum, Hexyldecanol, Hexyldecyl Laurate, Rhus Verniciflua Peel Cera/Rhus Succedanea Fruit Cera, Bis-Diglyceryl Polyacyladipate-2, Cera Alba, Tocopherol

INCI (USA): Ozokerite, Mineral Oil, Hexyldecanol, Hexyldecyl Laurate, Rhus Verniciflua Peel Wax/Rhus Succedanea Fruit Wax, Bis-Diglyceryl Polyacyladipate-2, Beeswax, Tocopherol MP: 73-79 ℃

6370 | LIP CARE BASE

Use level is approx. 70%, requires the addition of approx. 30% oils.

INCI (EU): Hexyldecyl Laurate, Hexyldecanol, Cera Microcristallina, Cetearyl Isononanoate, Propylene Glycol Dicaprylate/Dicaprate, Ascorbyl Palmitate

INCI (USA): Hexyldecyl Laurate, Hexyldecanol, Ozokerite, Cetearyl Isononanoate, Propylene Glycol Dicaprylate/Dicaprate, Ascorbyl

MP: 65-71 °C

7704 | NATURAL LIP CARE BASE

Pale colored complete lip care base containing only natural components. No further ingredients are necessary, but fragrance/flavor or oil-soluble actives can be added during cooling at 75 °C.

INCI (EU): Helianthus Annuus Seed Oli, Simmondsia Chinensis Seed Oli, Ricinus Communis Seed Oli, Rhus Verniciflua Peel Cera, Rhus Succedanea Fruit Cera, Cera Alba, Helianthus Annuus Seed Cera, Euphorbia Cerifera Cera, Shorea Robusta Resin. Toconherol.

INCI (USA): Helianthus Annuus (Sunflower) Seed Oil, Simmondsia Chinensis (Jojoba) Seed Oil, Ricinus Communis (Castor) Seed thus Vernicifiua Peel Wax/Rhus Succedanea Fruit Wax, Besswax, Helianthus Annuus (Sunflower) Seed Wax, Euphorbia Cerifera delilla) Wax, Shorea Robusta Resin, Tocopherol, Ascorbyl Palmitate

MP: 55-65 °C

18 | KAHI BASES KAHI RASES I 10

KAHL BEESWAX GRADES

One bee colony contains 30,000-70,000 bees and produces up to 70-80 kg honey, but only 500 g wax per year! Beeswax is formed by worker bees, which secrete it from eight wax-producing mirror gladed on the time sides of the stemilies. To produce their wax, bees must consume about eight gladed on the time sides of the stemilies. To produce their wax, bees must consume about eight is estimated that bees collectively fly \$30,000 km, roughly six times around the earth, to yield 1 kg of beexwax (15,000 fmeliporuni). Beexwax is very sustainable as it as phyroduct of the honey industry. Centrifuged honeycombs are reused as crude wax for our beeswax grades. Beeleepers reuse our high quality beexwax for pouring or pressing new honeycombs.

Beeswax is still the best-known and by volume the bestselling natural wax worldwide. Even though it has a quite heavy skin feel, it is still popular in many cosmetic preparations. Beeswax is also frequently used in other industries, such as pharma, food, leather, and wood care. KahlBeeswax is China compilant and certified for natural cosmetics.



MP: 55-65 ℃

8104 | BEESWAX WHITE

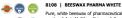
Pure, fine white beeswax is obtained from honeycombs of *Apis Mellifera* and is carefully physically bleached.

INCI (EU): Cera Alba | INCI (USA): Beeswax | MP: 61-65 °C



8105 | BEESWAX YELLOW Pure, yellow beeswax in cosmetic quality.

INCI (EU): Cera Alba | INCI (USA): Beeswax | MP: 61-65 °C



Pure, white beeswax of pharmaceutical quality which is obtained from honey-combs of Apis Mellifera. It is carefully physically bleached.**





8109 | BEESWAX PHARMA YELLOW 🤏 🤛 🤗 Yellow beeswax of pharmaceutical quality which is obtained from honeycombs of Apis Mellifera. It is not bleached, but carefully filtrated.** INCI (EU): Cera Alba | INCI (USA): Beeswax | MP: 61-66 °C 20 | KAHLBEESWAX GRADES





8138 | BEESWAX LC ORGANIC

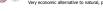
Mildly processed and physically bleached quality of very light color. Refined from crude organic beeswax exclusively sourced from approved and certified beekeepers. Free from any type of impurity.** INCI (EU): Cera Alba | INCI (USA): Beeswax | MP: 62-65 °C



99

Yellowish, non-bleached organic beeswax. Produced by physical cleaning and filtration technology.**

INCI (EU): Cera Alba | INCI (USA): Beeswax | MP: 62–65 °C



Very economic alternative to natural, pure, white beeswax. | INCI (EU/USA): Detailed information on request | MP: 61-65 °C

1545 | BEESWAX SUBSTITUTE YELLOW nic alternative to natural, pure, yellow beeswax. | INCI (EU/USA): Detailed information on request | MP: 61–65 °C

1540 | BEESWAX SUBSTITUTE WHITE

8019W | BEESWAX SUBSTITUTE WHITE

Beeswax blend with structuring properties for anhydrous and emulsion based cosmetics. 8019W shows less drag on the skin and can therefore be used at a higher dosage than natural beeswax. INCI (EU/USA): Detailed information on request | MP: 61-65 °C

8070W | BEESWAX SUBSTITUTE WHITE

Version with the characteristics most similar to natural beeswax at a reasonable price level.

INCI (EU/USA): Detailed information on request | MP: 62-65 °C

6103 | BEESWAX SUBSTITUTE NON-ANIMAL Very light-colored beeswax alternative for sticks and emulsions which is completely free of animal-derived raw materials. RSPO certified

KAHLBEESWAX GRADES | 21

INCI (EU): Cera Microcristallina, Hydrogenated Vegetable Oil, Stearyl Stearate, Stearic Acid

INCI (USA): Ozokerite, Hydrogenated Vegetable Oil, Stearyl Stearate, Stearic Acid | MP: 61-65 °C

** Complies with the GRAS status of the FDA (USA) as well as EC regulation No. 231/2012 for food additives.



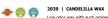
KAHL CANDELILLA WAX GRADES

Candelilla husbes are essentially leafless shrubs whose stems are covered in wax to prevent transpiration. The plants are cut and left in the sun to dry. Afterwards they are boiled out in water and the wax is skimmed off fro surface. Further refining processes result in standard or high quality candelilla wax.

Kahl Candellila wax is more brittle than beeswax and less hard than carnauba wax. It is a polar and hydrophobic wax, and due to its high resin content very adhesive. Kahl Candellila wax has a good oil binding capacity and is easy to work with thanks to its moderate melting point. It creates very hard oleogels, whether polar or nonpolar emollients

Kahl Candelilla wax provides high surface gloss and is the wax with the highest shrinkage/contraction capacity, which es demolding from metal molds.

There is no organic certified candelilla wax as the shrub grows wildly and not under controlled conditions





MCI (EU): Euphorbia Cerifera Cera | INCI (USA): Euphorbia Cerifera (Candelilla) Wax | MP: 68–73 °C

2039L | CANDELILLA WAX ***** 🖨 🦱

L-quality* obtained from the wild-growing shrub of the family Euphorbia Antisyphilitica native to Mexico. Excellent oil binding capacity, creates high gloss, and remarkable hardness.** INCI (EU): Euphorbia Cerifera Cera | INCI (USA): Euphorbia Cerifera (Candelilla) Wax | MP: 68-73 °C

2039N | CANDELILLA WAX BLEND

Bleached and purified candelilla wax blend with paraffin

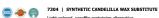
INCI (EU): Euphorbia Cerifera Cera, Paraffin | INCI (USA): Euphorbia Cerifera (Candellla) Wax, Paraffin | MP: 68–73 °C



All-natural, animal-free blend of carefully selected, high quality ingredients. Used in mascara it forms flexible layers on lashes and is an excellent volumizer. Improves adhesion of color cosmetic products. Stabilizes stick preparations.

INCI (EU): Helianthus Annuus Seed Cera, Shorea Robusta Resin, Rhus Verniciflua Peel Cera/Rhus Succedanea Fruit Cera, Tocophi According Balmitate INCI (USA): Helianthus Annuus (Sunflower) Seed Wax, Shorea Robusta Resin, Rhus Verniciflua Peel Wax/Rhus Succedanea Fruit Wax, Tocopherol, Ascorbyl Palmitate

MP: 72-78 °C



Light-colored, paraffin-containing alternativ INCI (EU): Paraffin, Copernicia Cerifera Cera, Glycol Montanate, Shorea Robusta Resin

INCI (USA): Paraffin, Copernicia Cerifera (Carnauba) Wax, Glycol Montanate, Shorea Robusta Resin | MP: 76-82 °C

22 | KAHLCANDELILLA WAX GRADES KAHLCANDELILLA WAX GRADES | 23

KAHLCARNAUBA WAX **GRADES**

Copernicia prunifera, which is native to and grows only wildly in northeastern Brazil. A planted palm needs 20 years to produce enough wax to be harvested. In hot, dry weather the plant secretes wax to protect its leaves from damage leaves are collected wild and cut off the tree. Old lea harvested in May, resulting in darker colored wax, a young leaves are harvested in November, yielding low colored wax. After drying the leaves in the sun, the wax is removed by beating the withered leaves. The crude wax is then refined by washing with water or extraction and distillation with a

Depending on the Kahl Carnauba wax grade, it thickens/ hardens stick and pencil preparations, anhydrous systems, oleogels, pastes, and W/O emulsions. Kahl Carnauba wax is a very hard, high melting, brittle wax with high crystallinity and outstanding oil binding capacity.

It provides lubricity and generates glossy stick surfaces, and functions as a dispersing aid for effect pigments. Kahl Carnauba wax is certified for natural cosmetics and China compliant.



24 | KAHLCARNAUBA WAX GRADES

* Due to a particular production procedure, all impurities are removed. The wax shows a clear melt and contains <5 mval/kg pers
** Complies with the GRAS status of the FDA (USA) as well as EC regulation No. 231/2012 for food additives.

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4180 | SYNTHETIC WAX

White, hard, high melting hydrocarbon wax. Reduces viscosity, increases hardness and raises the melting point of hot melts. Leads to very high gloss when used in stick preparations.***

INCI (EU/USA): Synthetic Wax | MP: 108-116 °C



White, medium hard hydrocarbon wax based on n- and isoparaffins. Cera Microcristallina is Kosher certified.

INCI (EU): Cera Microcristallina | INCI (USA): Ozokerite | MP: 72-79 °C

KAHLHYDROCARBON WAXES

Microcrystalline wax is produced by de-oiling petrolatum as a part of its refining process. It consists of saturated adiptact bydroacnows with a high molecular weight. Due to the typical crystal structure, which is small, thin and flexible, microcrystalline waxes are high melling (-75°C). They are characterized by the fineness of their crystals. The elastic and adhesive characteristics of microcrystalline waxes are related adhesive characteristics of microcrystalline waxes are related and every construction. to their non-straight chain components. Microcrystalline waxes are usually not used for hardening sticks, but to improve the moldability of formulations and their breakage resistance

Paraffin wax is also derived from petroleum and contains Parathin wax is also derived from petroleum and contains mostly unbranched alkanes. It has large crystals, but a lower molecular weight than microcrystalline wax. Paraffin wax is not very flexible, but improves the hardness of sticks.

Ozokerite, ceresin, and montan waxes are originally mineral waxes which are derived from coal and shale. As the mining of coal and shale has significantly declined, availability is diminishing. Ozokerite for cosmetics are nowadays synthesized from petroleum, exactly like microcrystalli waxes. Ozokerites reduce the brittleness of stick preparatio and add strength (hardness) and stability.

Polyethylene waxes are created by cracking polyethylene at 400 °C. There are high density and low density PE waxes. They have a very high melting point and therefore a huge impact on heat stability. Polyethylene wax forms hard oleogels and reduces oil bleeding. Typical use level is <5 % as at higher concentration the pay-off of stick preparations declines.



White hydrocarbon wax with very similar chemistry and application as natural ozokerites. Shows excellent oil binding capacity especially in lipsticks. Stabilizes viscosity of Wi/O emulsions and enhances storage stability without raising viscosity, Higher in molecular weight and viscosity than most other ozokerites. Cera Microristalina is Kosher certified.***

KAHLCARNAUBA WAX GRADES | 25

INCI (EU): Cera Microcristallina | INCI (USA): Ozokerite | MP: 78–84 °C

6294 | MICROWAX

White mixture of different hydrocarbon waxes with excellent oil binding capacity and high melting point. It works very well in anhydrous stick preparations, oleogels, and other oil based pastes. Cera Microcristallina is Kosher certified.*** INCI (EU): Cera Microcristallina | INCI (USA): Ozokerite | MP: 100-110 °C

6089 | MICROWAX

Pale colored, petrochemical wax consisting of branched-chain hydrocarbons. Plasticizer that improves homogenization of solvent based wax products.***

INCI (EU): Cera Microcristallina | INCI (USA): Microcrystalline Wax | MP: 80–86 °C

7475 | MICROWAX

Hard, white microcrystalline wax, suitable for stick formulations. Improves heat resistance and raises the melting point of sticks without making them too brittle.***

INCI (EU): Cera Microcristallina | INCI (USA): Microcrystalline Wax | MP: 88–96 °C

1847 | MICROWAX **→** 🖱 🙈

*** COLIPA recommendation 14 for hydrocarbons in lip products

Pale colored hydrocarbon wax consisting of branched-chain hydrocarbons derived from mineral oil.*** INCI (EU): Hydrogenated Microcrystalline Cera | INCI (USA): Hydrogenated Microcrystalline Wax

2803 | POLYETHYLENE Synthetic, white hydrocarbon wax. Improves the heat resistance of stick preparations, pastes and oleogels

INCI (EU/USA): Polvethylene | MP: 106-111 °C

26 I KAHI HYDROCARRON WAYES KAHI HYDDOCADRON WAYES I 27