

Emulsions

BE830 | Carnauba + Beeswax Microemulsion | food grade

Natural film former. Fine particle-sized, low-viscous wax microemulsion with a food grade emulsifier system.

natural wood, furniture and leather coating | paints | overprint varnish | foils for sausage casing (food) | lubricant for excellent adhesion | scratch resistance/hydrophobicity

ph value: 4.0–5.0 | particle size distribution: 150 nm | solid content: 39–41 %

SE607 | Sunflower + Carnauba Microemulsion | food grade

Natural film former. Fine particle-sized, non-ionic, low-viscous wax microemulsion. Emulsifier, non-ionic food grade.

foils for sausage casing (food) | ECO paper coating | natural stone | antiblocking | improves abrasion resistance | water repellence adhesion | increase slip

ph value: 3.5–5.5 | particle size distribution: 150 nm | solid content: 37–39 %

CE404 | Carnauba Wax Microemulsion

Non-ionic Carnauba wax microemulsion. Fine particle-sized, low-viscosity emulsion base. Compatible with most anionic, non-ionic and amphoteric surfactants. Creates hard wax films with excellent self-gloss.

natural wood, furniture and can coating | antiblocking | overprint varnish | increase hardness | improves abrasion resistance less than PE emulsions

ph value: 4.5–6.5 | particle size distribution: 140 nm | solid content: 39–41 %

RE281 | Rice Bran Wax Microemulsion

Non-ionic rice bran wax microemulsion. Low-viscous emulsion with excellent film forming behavior.

can and coil coating | scratch resistance/hydrophobicity

ph value: 6.5–8.5 | solid content: 28–31 %



KahlWaxes for Industrial Application

Sustainable Coatings

We are living in a world of constantly growing demands while the availability of industrial raw materials is becoming more and more difficult. The wax market is particularly affected since traditional waxes, such as montan wax, will disappear from the market in a few years. Others are synthetic and do not fit into the "green" philosophy, which is becoming more important to customers worldwide.


The traditional natural waxes suffer from poor crops due to environmental pollution and climatic changes, which leads to shortages and/or high prices. For this reason KahlWax developed a second generation of natural waxes from cultivated food plants like rice and sunflower. These natural waxes offer a unique technical performance, are available in virtually unlimited quantities at reasonable and stable prices, and as byproducts from the production of foods-stuffs they are sustainable and readily biodegradable.

KahlWax ensures the availability of your raw materials today, tomorrow and the day after tomorrow.

Natural Waxes

General Properties of Natural Waxes					
	Oil-binding	Cristallinity	Polarity	Hardness	Touch
Beeswax	●●	●●	●●	●	plastic, flexible
Candelilla Wax	●●	●●	●●	●●	hard, adhesive
Carnauba Wax	●●	●●●	●●●	●●●	very hard, brittle
Sunflower Seed Wax	●●●	●●●	●●●	●●	hard, dry
Rice Bran Wax	●	●●●	●●	●●●	very hard
Myrica Wax	●●	●●●	●	●●	hard, soapy
Berry Wax	●●●	●	●	●	soft, buttery

Cold Solubility of Natural Waxes				
	Solvesso™ 100	Xylol	Butylacetate	Shellsol® D 40
Beeswax	gel-like	fine dispersion	fine dispersion	fine dispersion
Carnauba Wax	fine dispersion	coarse dispersion	coarse dispersion	fine dispersion
Sunflower Seed Wax	gel-like	fine dispersion	fine dispersion	fine dispersion
Rice Bran Wax	fine dispersion	fine dispersion	fine dispersion	fine dispersion
Myrica Wax	clear solution	clear solution	clear solution	fine dispersion
Berry Wax	clear solution	clear solution	gel-like	fine dispersion



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Natural Waxes

8104 | Beeswax white

hotmelt ink | inkjet printing | natural wood, furniture and leather coating | metal sinter technology | paint additive | coating for food packaging

appearance: pellets | MP: 61–65 °C | penetration at 25 °C: 22 dmm | acid value: 17–24 mg KOH/g | saponification value: 87–104 mg KOH/g

8105 | Beeswax yellow

hotmelt ink | inkjet printing | natural wood, furniture and leather coating | metal sinter technology | paint additive | coating for food packaging

appearance: pellets | MP: 61–65 °C | penetration at 25 °C: 22 dmm | acid value: 17–22 mg KOH/g | saponification value: 87–102 mg KOH/g

2039L | Candelilla Wax

hotmelt ink | inkjet printing | solvent-free ECO thermo transfer printing | paint additive | food additive | coating for food packaging

appearance: pellets | MP: 68–73 °C | penetration at 25 °C: 1.5 dmm | acid value: 12–22 mg KOH/g | saponification value: 43–65 mg KOH/g

5023 | Carnauba Wax | T3

ECO thermo transfer printing | plastic and rubber lubricant | lubricant emulsion PET bottle packing | release agent for PU

appearance: flakes | MP: 80–86 °C | penetration at 25 °C: 1 dmm | acid value: 2–7 mg KOH/g | saponification value: 80–95 mg KOH/g

2442 | Carnauba Wax | T1

natural processing aid | can coating | hot stamping foil | fluorinated rubber lubricant | food additive

appearance: flakes | MP: 82–86 °C | penetration at 25 °C: 1 dmm | acid value: 2–7 mg KOH/g | saponification value: 78–95 mg KOH/g

6607L | Sunflower Seed Wax

natural wood, furniture and leather coating | plastic and rubber lubricant

appearance: pellets | MP: 74–80 °C | penetration at 25 °C: 2 dmm | acid value: 2–8 mg KOH/g | saponification value: 75–95 mg KOH/g

2811 | Rice Bran Wax

natural wood, furniture and leather coating

appearance: pellets | MP: 79–85 °C | penetration at 25 °C: 2 dmm | acid value: <15 mg KOH/g | saponification value: 65–95 mg KOH/g

7302L | Shellac Wax

ECO thermo transfer printing | release agent for PU

appearance: pellets | MP: 78–84 °C | acid value: 5–15 mg KOH/g | saponification value: 45–65 mg KOH/g

6279L | Myrica Fruit Wax

solid lubricant | appearance: pellets | MP: 45–55 °C | penetration at 25 °C: 2 dmm | acid value: 5–25 mg KOH/g | saponification value: 210–240 mg KOH/g

6290 | Berry Wax

wax crayons and pencils | appearance: pellets | MP: 48–54 °C | penetration at 25 °C: 20–30 dmm | acid value: 5–30 mg KOH/g | saponification value: 180–220 mg KOH/g



Natural Powders

2442P100N | Carnauba Wax Powder

plastic and rubber lubricant for fluoro rubber

appearance: natural fine-grained powder | MP: 82–86 °C | particle size distribution: <150 µm/unit 95 %

2442P7 | Carnauba Wax Powder fine

paint additive | food container coating | printing inks | varnish/lacquer | clear coat | antiblocking | good surface adhesion | offset printing flexo ink

appearance: natural spherical fine powder | MP: 82–86 °C | particle size distribution: <15 µm/unit 90 %

2811P7 | Rice Bran Wax Powder fine

paint additive | antiblocking | scratch resistance | high-gloss printing | water repellence adhesion and rub resistance

appearance: natural spherical fine powder | MP: 82–86 °C | particle size distribution: <15 µm/unit 90 %

2811P | Rice Bran Wax Beads

surface properties | paint additive | appearance: natural spherical beads | MP: 79–85 °C

particle size distribution: <250 µm/unit <5 %, <315 µm/unit approx. 1 %, <500 µm/unit approx. 80 %, <710 µm/unit approx. 95 %

7625P | Carnauba + Beeswax Beads

natural wood, furniture and leather coating

appearance: natural spherical beads | MP: 78–84 °C |

particle size distribution: 250 µm/unit >97 %, 500 µm/unit <40 %, 1000 µm/unit <3 %

Others

TBEP | Tris (2-Butoxyethyl) Phosphate (clear liquid)

Plasticizer with excellent defoaming levelling and cold flexibility performance for acrylics and synthetic rubber.