DEUREX®

THE WAX COMPANY

SYNTHETIC WAXES

DEUREX® EWAX

POLYETHYLENE WAXES

NATURAL WAXES

DEUREX® XWAX

SUGAR CANE WAXES

HYBRID WAXES

DEUREX® HWAX

HYBRID WAXES

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AIR CLASSIFICATION PROCESS

FLAKES
e.g. DEUREX E 11 F

GRANULES
e.g. DEUREX E 11 G

FINE GRANULES
e.g. DEUREX A 20 K

POWDERS
e.g. DEUREX A 20 P

FINEST POWDERS
e.g. DEUREX E 09 A

MICRO POWDERS
e.g. DEUREX S 3001 M

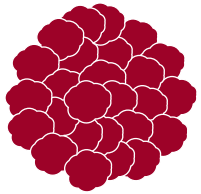
LIQUIDS
e.g. DEUREX E 0908 W

DEUREX AIR CLASSIFICATION PROCESS

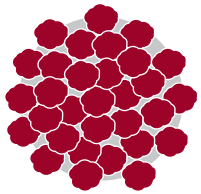
- Waxes are classified by air stream
- Wide range of delivery forms from fine granules through powder to micro-sized products
- Wind blows on a tree as metaphor:
  - Branches are not affected (slabs)
  - Twigs fall down (granules and fine granules)
  - Leaves fly through the air (powder)
  - Pollen fly far away (micro-sized products)
- Reasonable, clean and environmentally friendly technology
- All natural and synthetic waxes can be air classified
- Tailor-made particle sizes possible
- Production of hybrid and coated waxes
- Hybrid waxes are homogeneously blended products made of two or even more waxes
- Coated waxes work as carriers for various materials

DEUREX COATING PROCESS

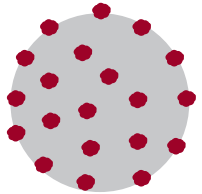
- The warm air classified products are coated with micro-sized and nano-sized additives
- Benefits of waxes and polymers are combined with benefits of additives:
  - PTFE for hardness and slip
  - Silica for matting and free flow
  - Diamond for extreme hardness
  - Zinc for matting
  - Benzoin for degassing
- Four distinct coating stages
  - Double coated waxes and polymers for dominating coatings properties
  - Fully coated waxes and polymers
  - Spot coated waxes and polymers
  - Eco coated waxes and polymers for dominating wax properties



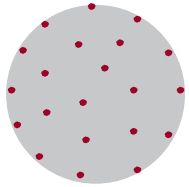
Double coated polymers for dominating coating properties



Fully coated polymers



Spot coated polymers



Eco coated polymers for dominating polymer properties

DEUREX® AWAX
AMIDE WAXES

DEUREX® EWAX
POLYETHYLENE WAXES

DEUREX® PTFE
MICRO-SIZED PTFE

DEUREX® HWAX
HYBRID WAXES

DEUREX® PWAX
POLYPROPYLENE WAXES

DEUREX® SiO2
MICRO-SIZED SILICA

DEUREX® TWAX
FISCHER-TROPSCH WAXES

DEUREX® XWAX
SUGAR CANE WAXES

AIR CLASSIFIED WAXES

DEUREX air classification technology allows various forms of delivery: From fine granules through powder to micro-sized products.

DEUREX air classification is a reasonable, clean and environmentally friendly technology. All natural and synthetic waxes can be air classified, tailor-made particle sizes can be produced.

HYBRID WAXES

Natural hybrid waxes combine benefits of sugar cane waxes with montan waxes and/or carnauba waxes.

Natural-synthetic hybrid wax combine a high acid value and flexibility of sugar cane waxes with high drop point and hardness of PE waxes.

Synthetic hybrid waxes combine various synthetic waxes such as PE waxes and amide waxes.

COATED WAXES

Coated waxes are waxes which work as carrier for various coating materials such as PTFE, Silica or Benzoin. The wax improves the dispersing properties and lifts the coating up to the surface of the powder coatings. From now on, it is possible to get the same results whilst using lower amounts of PTFE, Silica and other coating materials.

SUGAR CANE WAXES

Sugar cane waxes of the DEUREX X-series remain first choice for ecological formulations and products. DEUREX sugar cane waxes are pure natural waxes. During the production process of printing inks, paints and coatings, sugar cane waxes act as lubricants and moreover, they increase the colour output. Additionally, sugar cane waxes improve grip and scratch resistance in the end product. DEUREX sugar cane waxes are the perfect choice for the production of sustainable products.

PRODUCT NOMENCLATURE OF SOLID PRODUCTS

Our product nomenclature is the easiest way to identify our products:

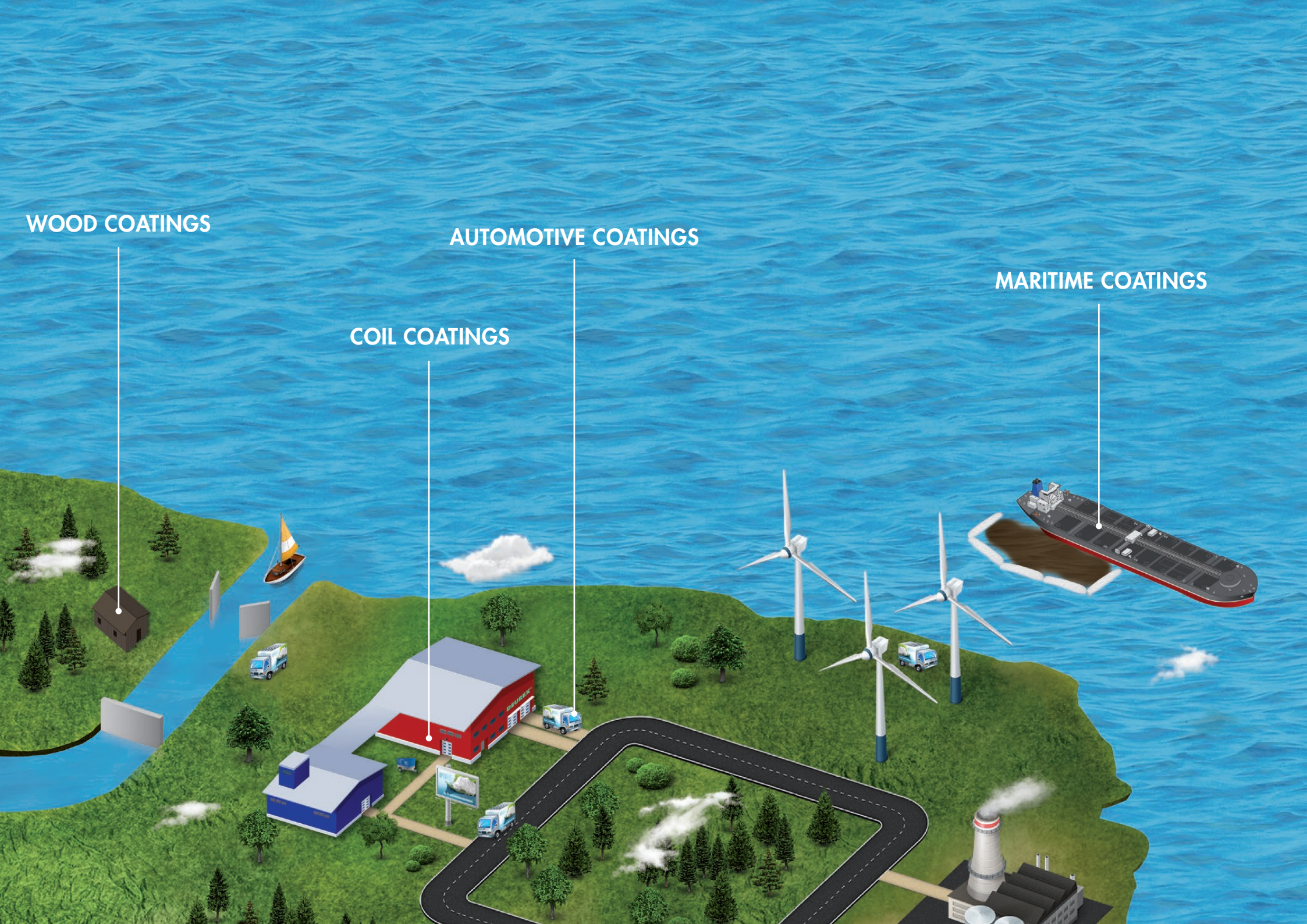
Our system allows you to recognize the chemistry, form of delivery and particle size right away.

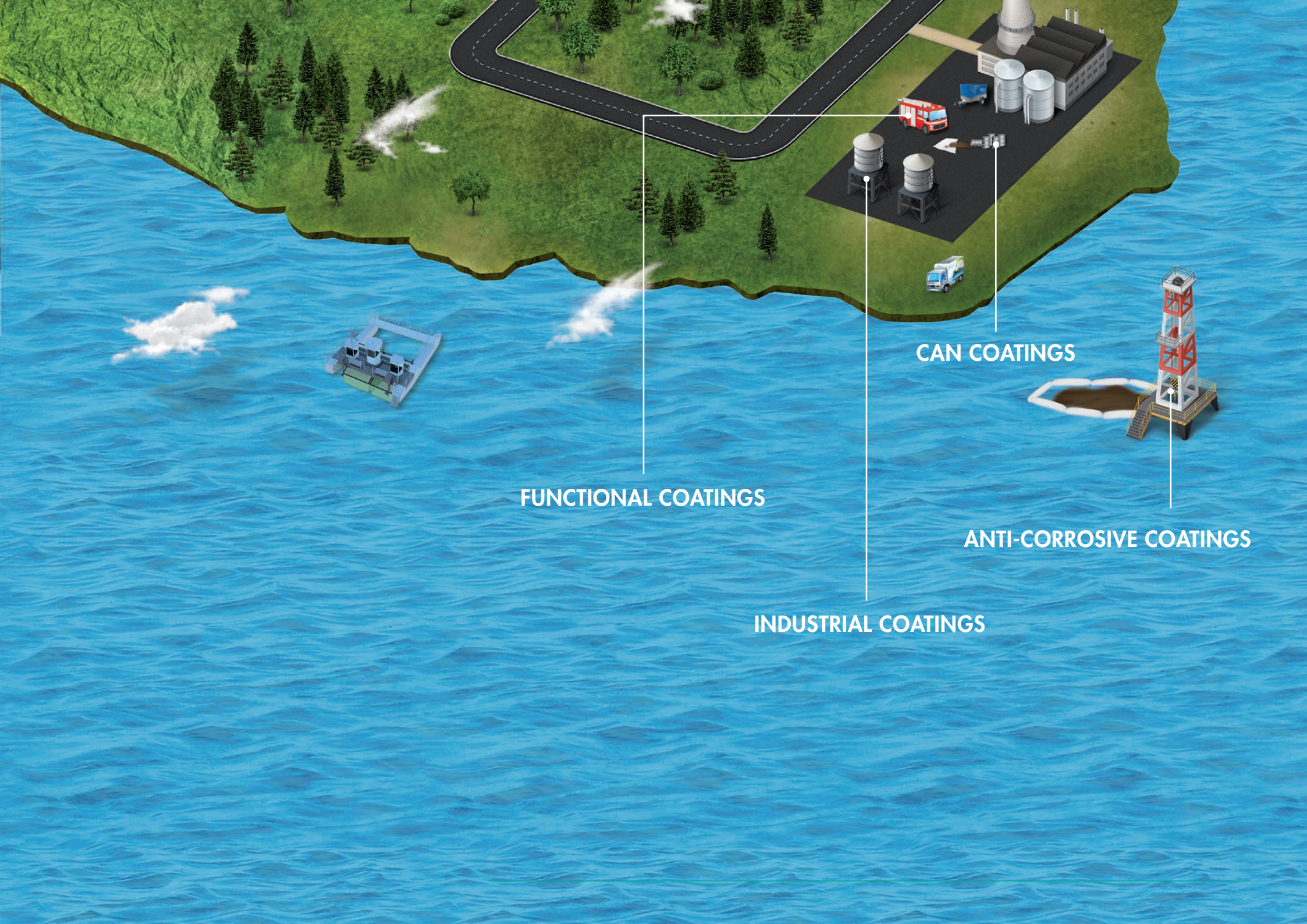
A Amide wax **E** Poly**E**thylene wax **F** PT**F**E **H** **H**ybrid wax **P** Poly**P**ropylene wax **S** **S**ilica **T** Fischer-**T**ropsch wax **X** Sugar cane wax	First 2 numbers Internal product code	Last 2 numbers Particle size, 98 % < x µm	**P** **P**owder **K** Fine granules **M** **M**icro-sized powder	
DEUREX E 0920 M =	Poly**E**thylene wax	**09**	98 % < **20** µm	**M**icro-sized powder

PRODUCT NOMENCLATURE OF LIQUID PRODUCTS

We are in the position to produce tailor-made emulsions and dispersions. Please inform us about your requirements on chemistry, solvents, solid content and other important parameters. We would be pleased to demonstrate our expertise to you and to produce your individual product.

A Amide wax **C** **C**omplexing agent **E** Poly**E**thylene wax **EO** Poly**E**thylene wax, **O**xidized **F** PT**F**E **P** Poly**P**ropylene wax **S** **S**ilica **T** Fischer-**T**ropsch wax **X** Sugar cane wax	First 2 numbers Internal product code	Last 2 numbers Particle size, 98 % < x µm	**O** **O**il-based dispersion **S** **S**olvent-based dispersion **W** **W**ater-based dispersion or emulsion	
DEUREX E 0908 W =	Poly**E**thylene wax	**09**	98 % < **08** µm	**W**ater-based dispersion


WOOD COATINGS
AUTOMOTIVE COATINGS
COIL COATINGS
MARITIME COATINGS


CAN COATINGS
FUNCTIONAL COATINGS
ANTI-CORROSIVE COATINGS
INDUSTRIAL COATINGS

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SOLID PRODUCTS	CHEMICAL CHARACTER	DROP POINT °C	DENSITY g/cm³	PARTICLE SIZE 98 % < x µm	LIQUID COATINGS		ANTI-BLOCKING	CHEMICAL RESISTANCE
					Water-based	Solvent-based		
DEUREX A 2015 M	Micro-sized EBS wax	142 - 151	0.98 - 1.00	15	xx	xx	x	
DEUREX E 0920 M	Micro-sized polyethylene wax	110 - 120	0.94 - 0.96	20	xx	xx	x	x
DEUREX F 6114 M	Micro-sized polyolefin wax double coated with PTFE	110 - 120	0.94 - 0.95	14	x	x	xx	xx
DEUREX F 6214 M	Micro-sized polyolefin wax fully coated with PTFE	110 - 120	0.94 - 0.95	14	x	x	xx	xx
DEUREX F 6314 M	Micro-sized polyolefin wax spot coated with PTFE	110 - 120	0.94 - 0.95	14	x	x	xx	xx
DEUREX F 6414 M	Micro-sized polyolefin wax spot coated with PTFE	110 - 120	0.94 - 0.95	14	x	x	xx	xx
DEUREX H 9220 M	Micro-sized hybrid wax (polyolefin and amide)	130 - 140	0.97 - 0.99	20	xx	xx	xx	x
DEUREX P 3620 M	Micro-sized polypropylene wax	150 - 170	0.87 - 0.89	20		x	x	
DEUREX P 3820 M	Micro-sized polypropylene wax	145 - 155	0.92 - 0.98	20	xx	xx	xx	x
DEUREX S 3001 M	Nano-sized Silica	1,600*	2.60 - 2.70	1	xx	xx	x	
DEUREX S 3012 M	Micro-sized Silica	1,600*	2.60 - 2.70	12	xx	xx	x	xx
DEUREX S 3017 M	Micro-sized Silica	1,600*	2.60 - 2.70	17	xx	xx	x	xx
DEUREX S 3119 M	Micro-sized polymer double coated with Silica	1,600*	0.97 - 0.99	19	xx	xx	x	xx
DEUREX S 3219 M	Micro-sized polymer fully coated with Silica	1,600*	0.97 - 0.99	19	xx	xx	x	xx
DEUREX S 3319 M	Micro-sized polymer spot coated with Silica	1,600*	0.97 - 0.99	19	xx	xx	x	xx
DEUREX S 3419 M	Micro-sized polymer eco coated with Silica	1,600*	0.97 - 0.99	19	xx	xx	x	x
DEUREX T 1915 M	Micro-sized Fischer-Tropsch wax	83 - 91	0.94 - 0.95	15	x	x	xx	x
DEUREX T 2915 M	Micro-sized Fischer-Tropsch wax	90 - 103	0.94 - 0.95	15	x	x	xx	x
DEUREX T 3915 M	Micro-sized Fischer-Tropsch wax	110 - 120	0.94 - 0.95	15	x	xx	xx	x
DEUREX T 3920 M	Micro-sized Fischer-Tropsch wax	110 - 120	0.94 - 0.95	20	x	x	xx	x
DEUREX T 4915 M	Micro-sized Fischer-Tropsch wax	112 - 120	0.94 - 0.95	15	x	x	xx	x
DEUREX X 2010 M	Micro-sized EBS wax based on sugar cane	140 - 145	0.98 - 1.00	10	xx	xx	x	xx
DEUREX X 5217 M	Micro-sized sugar cane wax	78 - 82	< 0.90	17	x			x

*melting point

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SOLID PRODUCTS	GLOSS	MATTING	METAL MARKING	OVER-PRINTABILITY	OVERPRINT VARNISH	QUICK DRYING	RUB RESISTANCE	SAND-ABILITY	SCRATCH RESISTANCE	SILKY FEEL EFFECT	SLIP	SOFT FEEL EFFECT	SURFACE HARDNESS	WATER REPELLENCY
DEUREX A 2015 M	x					x	x	xx	x		x	x		x
DEUREX E 0920 M	x	x	x	x	xx		xx	x	x		x	x	x	x
DEUREX F 6114 M		x	xx		x		x	x	xx		xx	x	xx	xx
DEUREX F 6214 M		x	xx		x		x	x	xx		xx	x	xx	xx
DEUREX F 6314 M		x	xx		x		x	x	xx		xx	x	xx	xx
DEUREX F 6414 M		x	xx		x		x	xx	xx		xx	x	xx	xx
DEUREX H 9220 M		x	x	x	x		x	x	xx		x	xx		x
DEUREX P 3620 M		x	x	x	x		x	x	xx		x	x	x	x
DEUREX P 3820 M		xx	xx	x	xx		xx	xx	xx		xx	x	x	xx
DEUREX S 3001 M		xx		x	xx	x	x	x	x	x	x			x
DEUREX S 3012 M		xx			x	x	x	x	x	x	x			x
DEUREX S 3017 M		xx			x	x	x	x	x	x	x			x
DEUREX S 3119 M		xx			x	x	x	x	x	x	x			x
DEUREX S 3219 M		xx			x	x	x	x	x	x	x			x
DEUREX S 3319 M		xx			x	x	xx	x	xx	x	x			xx
DEUREX S 3419 M		xx	x		x	x	xx	xx	xx	x	x			xx
DEUREX T 1915 M		xx	xx		x		xx	xx	x	x	x		x	xx
DEUREX T 2915 M		x	xx		x		xx	xx	x	x	x		x	xx
DEUREX T 3915 M		x	xx	x	x		xx	xx	x	x	x		x	xx
DEUREX T 3920 M		x	xx	x	x		xx	xx	x	x	x		x	xx
DEUREX T 4915 M		xx	xx	x	x		xx	xx	x	x	x		x	xx
DEUREX X 2010 M		x	x	x	x	x	x	xx	x	x	x	x		xx
DEUREX X 5217 M		xx	x				xx	xx			x	xx		xx

DISPERSIONS	CHEMICAL CHARACTER	DROP POINT °C	PARTICLE SIZE 98 % < x µm	SOLID CONTENT %	LIQUID COATINGS	ANTI-BLOCKING	CHEMICAL RESISTANCE
DEUREX E 0908 W	Water-based dipersion of polyethylene wax	110 - 120	8	44 - 46	xx	x	x
DEUREX F 6408 W	Water-based dispersion of polyolefin wax eco coated with PTFE	110 - 120	8	44 - 46	x	xx	xx
DEUREX P 3608 W	Water-based dispersion of polypropylene wax	150 - 170	8	44 - 46	x	x	
DEUREX P 3808 W	Water-based dispersion of polypropylene wax	145 - 155	8	44 - 46	xx	xx	x
DEUREX T 3908 W	Water-based dispersion of Fischer-Tropsch wax	110 - 120	8	44 - 46	x	xx	x

EMULSIONS	CHEMICAL CHARACTER	DROP POINT °C	PARTICLE SIZE 98 % < x µm	SOLID CONTENT %	LIQUID COATINGS	ANTI-BLOCKING	CHEMICAL RESISTANCE
DEUREX E 1101 W	Water-based emulsion of polyethylene wax	110 - 120	1	34 - 36	xx	x	x
DEUREX EO 4001 W	Water-based emulsion of oxidized polyethylene wax	97 - 105	1	29 - 31	x	x	x
DEUREX EO 4501 W	Water-based emulsion of oxidized HDPE	125 - 135	1	34 - 36	x	x	x
DEUREX P 3601 W	Water-based emulsion of polypropylene wax	150 - 170	1	39 - 41	x	x	
DEUREX S 3001 W	Water based emulsion of Silica	1,600*	1	39 - 41	xx	x	xx
DEUREX X 5201 W	Water-based emulsion of sugar cane wax	78 - 82	1	33 - 36	x		x

*melting point

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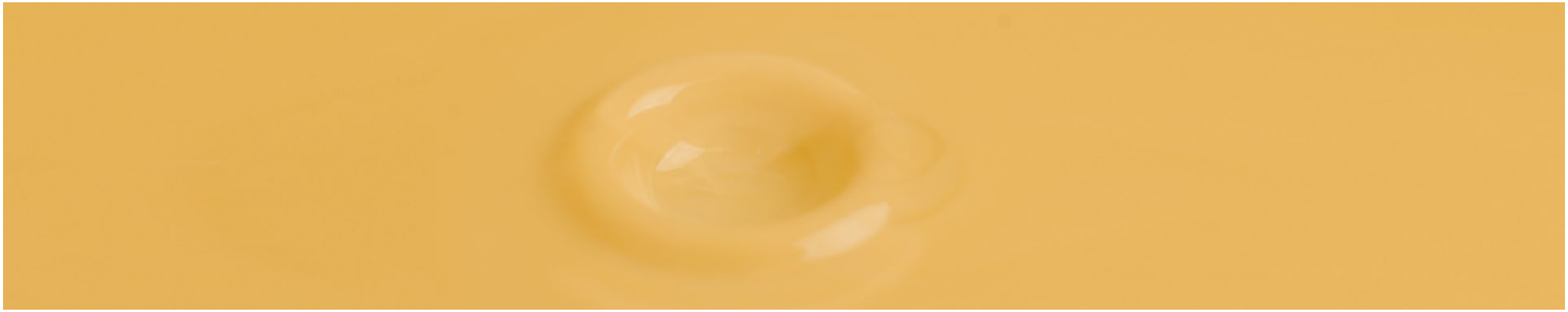
DISPERSIONS	MATTING	METAL MARKING	OVER-PRINTABILITY	OVERPRINT VARNISH	RUB RESISTANCE	SAND-ABILITY	SCRATCH RESISTANCE	SILKY FEEL EFFECT	SLIP	SOFT FEEL EFFECT	SURFACE HARDNESS	WATER REPELLENCY
DEUREX E 0908 W	x	x	x	x	xx	x	x		x	x	x	x
DEUREX F 6408 W	x	xx		x	x	xx	xx		xx	x	xx	xx
DEUREX P 3608 W	x	x	x	x	x	x	xx		x	x	x	x
DEUREX P 3808 W	xx	xx	x	x	xx	xx	xx		xx	x	x	xx
DEUREX T 3908 W	x	xx	x	x	xx	xx	x	x	x		x	xx



EMULSIONS	MATTING	METAL MARKING	OVER-PRINTABILITY	OVERPRINT VARNISH	RUB RESISTANCE	SAND-ABILITY	SCRATCH RESISTANCE	SILKY FEEL EFFECT	SLIP	SOFT FEEL EFFECT	SURFACE HARDNESS	WATER REPELLENCY
DEUREX E 1101 W	x	x	x	xx	xx	x	x		x	x	x	x
DEUREX EO 4001 W	x		x	x	x		x		x		x	x
DEUREX EO 4501 W	x		x	x	x		x		x		x	x
DEUREX P 3601 W	x	x	x	x	x	x	xx		x	x		x
DEUREX S 3001 W	xx			x	x	x	x	x	x			x
DEUREX X 5201 W	xx	x			xx	xx			x	xx		xx

LIQUID COATINGS • DEUREX WAXES FOR LIQUID COATINGS • DEUREX WAXES FOR LIQUID COATINGS •

LIQUID
COATINGS

DEUREX®

THE WAX COMPANY

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