DEUREX®

THE WAX COMPANY

SYNTHETIC WAXES

DEUREX® TWAX
FISCHER-TROPSCH WAXES

DEUREX® EWAX
POLYETHYLENE WAXES

NATURAL WAXES

DEUREX® XWAX
SUGAR CANE WAXES

HYBRID WAXES

DEUREX® HWAX
HYBRID WAXES

HOT MELTS

- Thermoplastic adhesives
- Solid at room temperature
- Applied in hot, molten state
- Adhesion starts when cooling down
- Free from solvents and decomposition products

BENEFITS OF HOT MELTS

- More environmentally friendly than other adhesives
- No use of solvents
- Fast dry times allow an easy and fast processing
- Long durability
- Easy to store in solid state
- Also applicable on uneven surfaces

APPLICATIONS OF HOT MELTS

- Paper industry
- Hygiene products
- Shoe industry
- Packaging industry
- Wood processing industry
- Graphic arts industry
- Automotive industry
- Road marking

OPTIMIZE HOT MELTS WITH DEUREX WAXES

- In general, hot melts contain 10 % to 30 % of waxes
- Lower dosage when using DEUREX waxes
- Adjustment of technical properties, such as:
  - Softening point
  - Viscosity
  - Thermal stability
  - Increased adhesion at higher temperatures
  - Increased compatibility with paraffin and basic polymers
  - Increased flexibility

DEUREX WAXES FOR HOT MELTS

FISCHER-TROPSCH WAXES

DEUREX T–SERIES

- Regulation of dry time and cure time
- Adapt opening time of hot melts
- High crystalline FT waxes for short open time
- Low crystalline FT waxes for longer open time
- Low melting FT waxes for cold-sensitive hot melts
- High melting FT waxes with very high crystallinity and high solidification point

AMIDE WAXES

DEUREX X 20

- Vegetable Ethylene-Bis-Stearamide wax (EBS)
- Based on stearic acid from the sugar cane plant
- The new product is much brighter than other amide waxes
- Compared to other EBS waxes it does not smell
- High drop point and close meshed hydrocarbon chains
- Internal and external lubricant
- Perfect suitable for temperature resistant hot melts
- Low acid value (< 5 mg KOH/g) increases UV resistance

POLYETHYLENE WAXES

DEUREX E 09

- Very high crystallinity and hardness
- Application in transparent and opaque hot melts
- A more attractive price than Fischer-Tropsch waxes
- Close meshed hydrocarbon chains
- Perfect control of rheology and boost adhesion

DEUREX E 11

- Very good price-performance ratio
- Very suitable for cold sensitive applications such as sealants in refrigerators
- Long opening time
- Wide but constant hydrocarbon chain distribution, without functional groups

WATER-BASED WAX EMULSIONS

DEUREX E 1101 W and DEUREX EO 4501 W

- Tailor-made as anti-blocking and anti-caking additive

SUGAR CANE WAXES

DEUREX X 52

- Natural wax for ecological hot melts (e.g. biomass adhesives)
- Perfect suitable for BIO hot melts
- High hardness
- Easy to emulsify and grindable
- Reduces viscosity and processing temperature of hot melts
- Very suitable for cold sensitive applications
- Improves ecological balance

HYBRID WAXES

DEUREX H 91

- Connects Fischer-Tropsch wax and polyethylene wax
- High crystallinity and solidification point
- Regulation of drying time and curing time

DEUREX®
THE WAX COMPANY

SYNTHETIC WAXES	CHEMICAL DESCRIPTION	DROP POINT °C	SOLID. POINT °C	VISCOSITY mPas 140 °C	PENETRATION dmm	DENSITY g/cm³
DEUREX T 17	Fischer-Tropsch wax	68 - 78	~ 70	< 20	8 - 15	0.85 - 0.90
DEUREX T 19	Fischer-Tropsch wax	83 - 91	~ 80	< 15	6 – 9	0.94 - 0.95
DEUREX T 29	Fischer-Tropsch wax	90 - 103	~ 90	< 20	4 - 7	0.94 - 0.95
DEUREX T 39	Fischer-Tropsch wax	110 -120	~ 100	< 20	< 1	0.94 - 0.95
DEUREX T 49	Fischer-Tropsch wax	112 - 120	~ 105	< 20	< 0.5	0.94 - 0.95

SYNTHETIC WAXES	CHEMICAL DESCRIPTION	DROP POINT °C	ACID VALUE mg KOH/g	VISCOSITY mPas 140 °C	PENETRATION dmm	DENSITY g/cm³
DEUREX E 09	Polyethylene wax	110 - 120	0	< 40	2 - 5	0.94 - 0.96
DEUREX E 11	Polyethylene wax	110 - 120	0	< 80	3 - 7	0.94 - 0.96
DEUREX H 91	Hybrid wax, Fischer-Tropsch wax and PE wax	110 - 120	0	< 20	< 5	0.94 - 0.95

NATURAL PRODUCTS	CHEMICAL DESCRIPTION	DROP POINT °C	ACID VALUE mg KOH/g	VISCOSITY mPas 140 °C	PENETRATION dmm	DENSITY g/cm³
DEUREX X 20	Vegetable Ethylene-Bis-Steramide wax	140 - 145	< 5	< 20	1 - 3	0.98 - 1.00
DEUREX X 52	Sugar cane wax	78 - 82	20 - 30	< 40	1 - 3	0.90

EMULSIONS	CHEMICAL DESCRIPTION	DROP POINT °C	VISCOSITY mPas 140 °C	SOLID CONTENT	EMULSIFYER SYSTEM	PH-VALUE
DEUREX E 1101 W	Water borne emulsion based on DEUREX E 11 K	110 - 120	< 1,000	34 % - 36 %	Non ionic	6.0 - 8.0
DEUREX EO 4501 W	Water borne emulsion based on DEUREX EO 45	125 - 135	< 1,000	34 % - 36 %	Non ionic	8 - 10

HOT MELTS • DEUREX WAXES FOR HOT MELTS • DEUREX WAXES FOR HOT MELTS •

HOT MELTS

DEUREX®

THE WAX COMPANY

DEUREX AG

Dr.-Bergius-Straße 8-12
D-06729 Elsteraue

Phone +49 (0) 34 41 - 8 29 29 29
Fax +49 (0) 34 41 - 8 29 29 28

www.deurex.com
info@deurex.com