

**DEUREX<sup>®</sup>**

THE WAX COMPANY



**POLYETHYLENE WAXES**

**DEUREX<sup>®</sup> EWAX**  
POLYETHYLENE WAXES

**SUGAR CANE WAXES**

**DEUREX<sup>®</sup> XWAX**  
SUGAR CANE WAXES

**HYBRID WAXES**

**DEUREX<sup>®</sup> HWAX**  
HYBRID WAXES

## CABLE

- Multi-core cluster of single lines coated with insulating materials
- Used to transmit energy or information
- Insulating materials are different plastics
- Surround the wires and insulate against each other
- Electrical control and data wires must be well insulated and separated from other live parts
  
- Underground cables
- Telecommunication cables
- Installation cables in households and industrial buildings
- Submarine cables
- Electronic equipment from TVs to electron microscopes
- Harnesses for automotive industry
- Special thin-walled lines in vehicles

## DEUREX WAXES FOR CABLE INDUSTRY

- DEUREX wax additives are offered for wires and cables for both insulation and cable sheath
- For traditional Pb-stabilized and Ca-Zn-stabilized systems
- Wax additives allow processing of the very brittle PVC and thus substantially determine the properties of cables
- Tailor-made additives
- Rheological properties
- Good insulating properties of PE waxes
  - Dielectric constant  $\epsilon = 2,4$
  - Volume resistivity =  $10^{16} \Omega\text{m} \times \text{cm}$  (DIN 53 482, 25 °C)
  
- Waxes are inert materials
- High resistance against weather conditions (water, heat, cold and UV rays)
- Increased flowability of the PVC dry blend
- Excellent thermal stability for static and flexible cabling
- Optimal incorporation of color pigments for color stability
- Internal or external lubricants
- Good dispersion and processability
- Softening and lubricating properties
- Easy to apply in high-speed extruders and fast running machines
- Reduce manufacturing costs

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## DEUREX WAXES FOR THE CABLE INDUSTRY

### POLYETHYLENE WAXES

#### DEUREX E 12

- Particularly narrow carbon chain distribution
- Improved long-term and UV-stability
- Reduced yellowing
- Excellent dispersing agent in PVC processing
- Standard product with excellent price-performance-ratio
- High viscosity improves the processing of difficult to disperse components

#### DEUREX E 11

- Excellent dispersing agent in PVC processing
- Standard product with excellent price-performance ratio
- Low viscosity reduces processing times and power costs

#### DEUREX E 10

- Perfect for cost sensitive products
- Very good processing aid for PVC compounds
- Low viscosity reduces processing times and power costs

### SUGAR CANE WAX

#### DEUREX X 51

- Natural sugar cane wax as a renewable raw material
- Perfect for production of ecological products such as bio cables
- Low viscosity supports the incorporation of other additives
- Suitable for cables with special mechanical requirements
- Provides good slip and smoothness to the PVC
- Provides a mat satin gloss to the final products
- Natural alternative to montanic waxes

### HYBRID WAXES

#### DEUREX H 72

- Connects sugar cane wax and montanic wax
- Perfect for production of ecological products such as bio cables
- Suitable for cables with special mechanical requirements
- Increased flexibility of the final product
- Water repellency

#### DEUREX H 83

- Connects sugar cane wax and PE wax
- Combined internal and external lubricant
- Plasticizer for PVC processing

#### DEUREX H 84

- Connects sugar cane wax and PE wax
- Combined internal and external lubricant
- Plasticizer for PVC processing at higher temperatures



DEUREX E 10 K



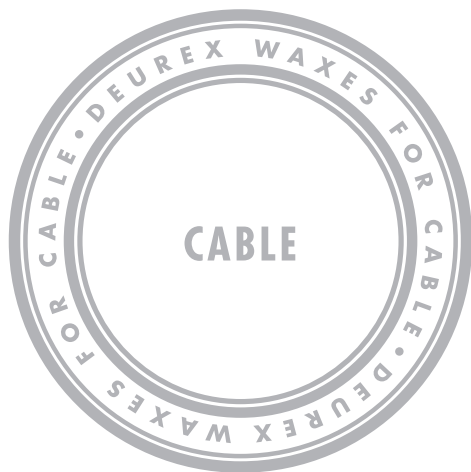
DEUREX H 72 P



DEUREX X 51 G

	CHEMICAL DESCRIPTION	DROP POINT °C	ACID VALUE mg KOH/g	VISCOSITY mPas 140 °C	PENETRATION dmm	DENSITY g/cm <sup>3</sup>
<b>DEUREX E 10</b>	Non polar polyethylene wax	100 - 110	0	< 40	10 - 25	0.94 - 0.96
<b>DEUREX E 11</b>	Non polar polyethylene wax	110 - 120	0	< 80	3 - 7	0.94 - 0.96
<b>DEUREX E 12</b>	Non polar polyethylene wax	106 - 114	0	100 - 200	3 - 4	0.93 - 0.94
<b>DEUREX X 51</b>	Sugar cane wax	68 - 80	20 - 50	< 40	2 - 4	< 0.90
<b>DEUREX H 72</b>	Hybrid wax, sugar cane wax and montanic wax	78 - 88	15 - 25	< 10	1 - 2	0.92 - 0.95
<b>DEUREX H 83</b>	Hybrid wax, sugar cane wax and PE wax	90 - 110	5 - 10	< 20	5 - 10	0.90 - 0.93
<b>DEUREX H 84</b>	Hybrid wax, sugar cane wax and PE wax	120 - 130	8 - 13	< 20	4 - 8	0.90 - 0.93

All data are based on our current knowledge and inform about our products and their applications. There is no assurance for certain properties and their suitability for certain applications. The customer is responsible to care for the necessary safety measures and to ensure the appropriate handling of the product. Existing industrial property rights have to be considered. An unobjectionable quality is assured within the scope of our general terms and conditions.



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