

## DEUREX EO 44 P

### TECHNICAL INFORMATION

<b>Chemical description:</b>	Oxidized HDPE wax		
<b>Production process:</b>	Wet oxidation		
<b>Applications:</b>	<p><u>PVC and other plastics</u></p> <ul style="list-style-type: none"> <li>- Perfect designed for all U-PVC and P-PVC applications but also for C-PVC</li> </ul> <p>DEUREX oxidized HDPE waxes are the best choice of lubricants especially in combination with calcium-zinc and tin stabilizers for rigid PVC products like window profiles, technical profiles, pipes and fittings.</p>		
<b>Properties:</b>	<p>Partially internal and external wax, highly effective wax</p> <ul style="list-style-type: none"> <li>- Accelerates fusion</li> <li>- Increases torque and pressure</li> <li>- Synergistic effect in combination with non-polar PE waxes by reduction of melt viscosity</li> <li>- Very effective for the usage in processing PVC regrind</li> <li>- Dust free</li> </ul>		
<b>Typical dosages:</b>	<p>Depending on the rheological requirements:</p> <ul style="list-style-type: none"> <li>- up to 0.2 phr for PVC</li> <li>- up to 0.5 phr for C-PVC</li> </ul>		
<b>Technical data:</b>	Colour:	Off-white	
	Delivery form:	<b>DEUREX EO 44 P</b> = Powder	
		Minimum	Maximum
	Drop point*:	132 °C	135 °C
	Acid value*:	15 mg KOH/g	19 mg KOH/g
	Penetration:		0.5 mm*10 <sup>-1</sup>
	Viscosity (140 °C):		4.000 mPas
	Density (23 °C):	0.97 g/cm <sup>3</sup>	0.99 g/cm <sup>3</sup>
			Method
			ASTM D 3954
			ASTM D 1386
			ASTM D 1321
			ISO 3219
			ISO 1183
	* Part of certificate of analysis		
<b>Approvals:</b>	Food contact approvals		
<b>Alternative products:</b>	See <a href="https://www.deurex.com/productsearch/DEUREX-EO-44-P/">https://www.deurex.com/productsearch/DEUREX-EO-44-P/</a>		

This data sheet is based on our current knowledge and experience. In view of the individual factors that may affect processing and application, this data does not relieve users from the responsibility of carrying out their own tests and experiments, neither do they imply any legally binding assurance of certain properties. Existing industrial/commercial protective laws have to be considered by the recipient. Updated versions of the data sheet replace all formerly existing versions.

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DEUREX EO 40, EO 43, EO 44 and TO 80 was investigated in a calcium-zinc stabilized window profile formulation containing:

- 100 phr S-PVC (k=67)
- 10 phr coated calcium carbonate, window profile grade
- 4 phr titanium dioxide, rutile, window profile grade
- 6 phr acrylic impact modifier
- 3 phr calcium-zinc stabilizer

The dry blends were mixed up to 120°C in a high speed hot mixer and cooled down to 45°C. After a relaxation time of >12 hours the dry blend was extruded on a parallel twin screw extruder KMD 35-26. The results are summarized in Fig. 1 to Fig. 4.

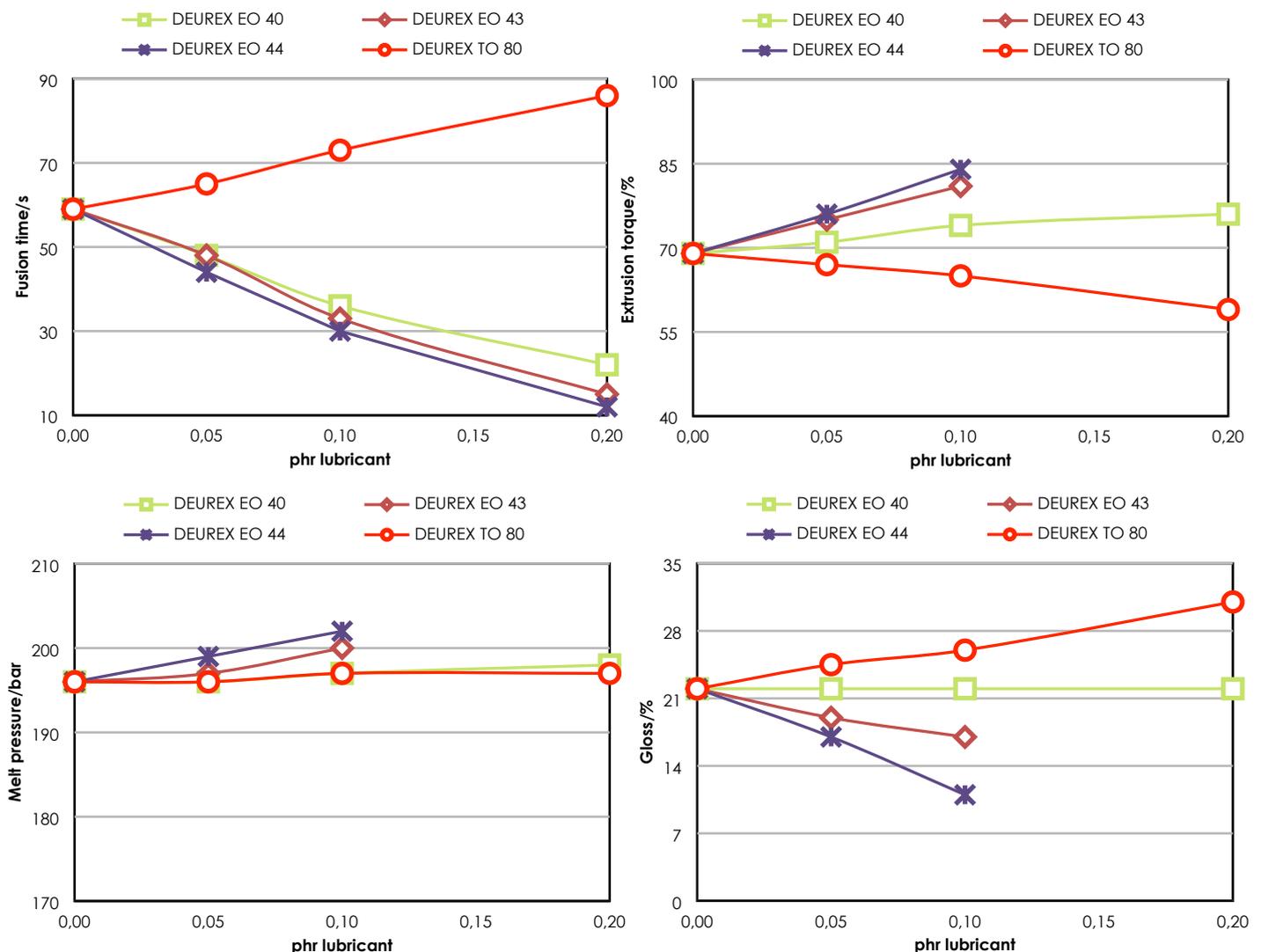


Fig. 1 to Fig. 4 Influence of the dosage of DEUREX EO 44 in comparison to EO 40, EO 43 and TO 80 on fusion time (Fig. 1), extrusion torque (Fig. 2), melt pressure (Fig. 3) and gloss (Fig. 4)

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