











Industry: Pharmaceutical				
Applications	Substances	Requirements	Standards	Polarimeters
<ul> <li>Determination of the concentration</li> <li>of sugar as an ingredient of pharmaceutical agents</li> <li>Purity control and content determination</li> <li>Determination of the stereochemical composition and mutarotation</li> <li>Characterisation of new synthetic substances</li> <li>Ensuring enantiometer separation</li> <li>Concentration determination of optically active substances</li> <li>Analyzing toxic and pharmacological characteristics</li> </ul>	Sugar, Vitamins Amino acids and proteins Blood sera, steroids, antibiotics, hormones painkillers, amphetamines Schmerzmittel, Amphetamine etc.	Standards conformity	Pharmacopoeias (USP, BP, JP, Ph. Eur.) 21 CFR Part 11	P8000-T P8000-P

Industry: Chemical				
Applications	Substances	Requirements	Standards	Polarimeters
<ul> <li>Purity control and concentration determination,</li> <li>Tracking of chemical processes in the production of optically active substances,</li> <li>Characterization tests in research laboratories</li> <li>Reaction kinetics studies</li> </ul>	<ul> <li>→ Biopolymers, synthetic polymers</li> <li>→ Glycerinaldehydes</li> <li>→ Various hydrocarbons etc.</li> </ul>	<ul> <li>Control at different temperatures,</li> <li>Variability of the measurement methods</li> <li>Option of interval measurements</li> </ul>	<ul> <li>AOAC, OIML, ASTM</li> <li>Pharmacopoeias (USP, BP, JP, Ph. Eur.)</li> <li>21 CFR Part 11</li> </ul>	P8000-T P8000-P

Industry: Food and Beverage				
Applications	Substances	Requirements	Standards	Polarimeters
<ul> <li>Characterization, quality and purity control of raw materials and end products</li> <li>Determination of sugar concentration in beverages and confectionery products</li> <li>Quality control &amp; purity determination of starch and starch-based products, dextrose or corn syrup</li> <li>Analysis of carbohydrate components as an indication of product quality</li> <li>Routine analysis with high sample volumes</li> </ul>	Sugar, starch Polysaccharides in food and animal feed products Flavors Lactose in milk, lactic acid Glucose in wine Sugar content in honey, etc.	Fast measurement with easy handling     Robust, acid-resistant measuring tubes	• AOAC, OIML, ASTM	P8000-T P8000-TF



Industry: Sugar				
Applications	Substances	Requirements	Standards	Polarimeters
<ul> <li>Determination of the sugar concentration of raw materials, preliminary, intermediate and final products,</li> <li>Tracking of chemical processes, e.g. in invert sugar production,</li> <li>Quality control &amp; purity determination of starch and starch-based products, dextrose or corn syrup</li> <li>Analysis of carbohydrate components as an indication of product quality</li> </ul>	→ Sugar cane → Beet pulp → Molasses, refined sugar → Syrup, invert sugar, dextrose → Corn syrup etc.	<ul> <li>Availability of the international sugar scale</li> <li>No need for maintenance</li> </ul>	• ICUMSA	P8000 P3000 (with temperature control)

Industry: Manufacturers Aromas, Fragrances and Essentials Oils				
Applications	Substances	Requirements	Standards	Polarimeters
<ul> <li>Qualitätskontrolle von Roh- und Hilfsstoffen</li> <li>Überwachung der Produktion von Zwischen- und Endprodukten</li> <li>Reinheitsmessungen von wertvollen ätherischen Ölen</li> <li>Garantie der gleichbleibenden Qualität von Parfümen</li> </ul>	<ul> <li>Essential oils:         orange, lavender,         lime and pepper         mint oil</li> <li>Glyceric acid</li> <li>Aromas and         perfumes for the         food and         cosmetics industry         etc.</li> </ul>	<ul> <li>High resistance to chemicals</li> <li>Availability of micro-cuvettes</li> </ul>	<ul> <li>AOAC, OIML,</li> <li>Pharmacopoeias (Ph. Eur.)</li> </ul>	P8000-TF

Hospitals and Pharmacies				
Applications	Substances	Requirements	Standards	Polarimeters
<ul> <li>Incoming goods/outgoing goods inspection</li> <li>Control of medicines according to pharmacopoeias</li> </ul>	→ Drug ingredients → Pharmaceutical raw materials and excipients	<ul><li>Robustness</li><li>Easy handling</li><li>Low price</li></ul>	<ul><li>Pharmacopoeias (USP, BP, JP, Ph. Eur.)</li><li>21 CFR Part 11</li></ul>	P1000-LED P3000 (with temperature control)

Education in Industry or at Universities		
Applications	Requirements	Polarimeters
<ul> <li>Use in practical exercises and experiments on:</li> <li>→ Kinetics of cane sugar inversion</li> <li>→ Mutarotation of glucose</li> <li>→ Concentration determination of polysaccharides by starch hydrolysis</li> </ul>	<ul><li>Robustness</li><li>Easy handling</li><li>Low price</li></ul>	P1000-LED P3000 (with temperature control)



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