

# Series 200a Refractive Index Detector

## Sensitive, Stable, Reliable



The Series 200a Refractive Index (RI) Detector is a highly stable and sensitive LC and GPC detector for use with compounds that do not have high absorptivity in the UV range, such as polymers, sugars, organic acids, and triglycerides.

The Series 200a, with its deflection-type design, allows sensitive detection of these compounds with low noise and drift characteristics. This advanced detector features internal temperature control of the flow cell, offset adjustment, autozero and autopurge of the reference cell, all with easy keypad entry. A full-color LCD allows the user to set and verify analytical conditions and baseline trends.

### Reliable, unattended analysis

The Series 200a RI detector makes it easy to perform unattended routine analyses or methods development.

The autopurge and autozero capabilities can be remotely actuated, which allows automatic solvent changes and baseline adjustments, providing you with reproducible, reliable and accurate results every time.

The Series 200a RI detector is compatible with all PerkinElmer LC components and data systems. For GPC analysis, TurboSEC Size Exclusion Software can be added for flexible data manipulation.

### Key Features

- ▶ Detector stability increased with active temperature control of the flow cell
- ▶ Compact design
- ▶ Unattended operation through remote autozero and autopurge function
- ▶ Compatible with a variety of mobile phases without having to change prisms due to its broad refractive index range
- ▶ Safe operation ensured with leak drain and solvent leak sensor generates signal to stop pump flow.

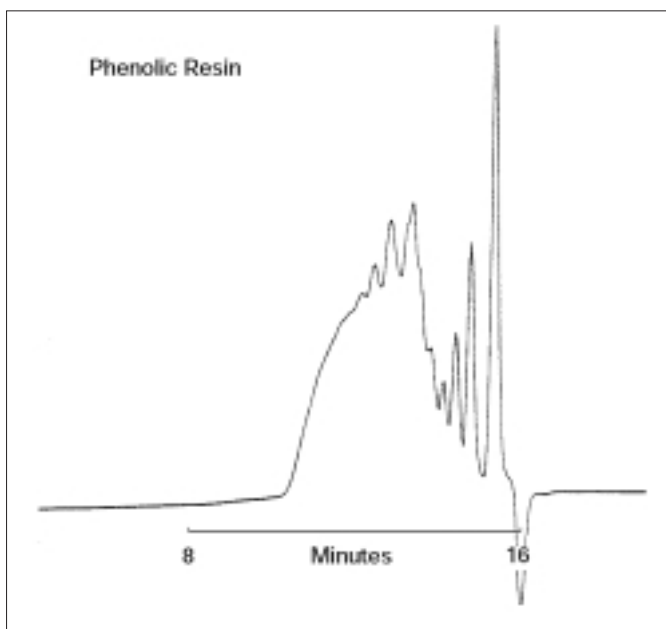


Figure 1. GPC: phenolic resin.

**Column:** Two PE PLgel 5  $\mu\text{m}$  500 $\text{\AA}$ , 100 $\text{\AA}$  (300 x 7.5 mm)  
**Detection:** RI  
**Mobile Phase:** DMF at 50  $^{\circ}\text{C}$   
**Flow Rate:** 1 mL/min

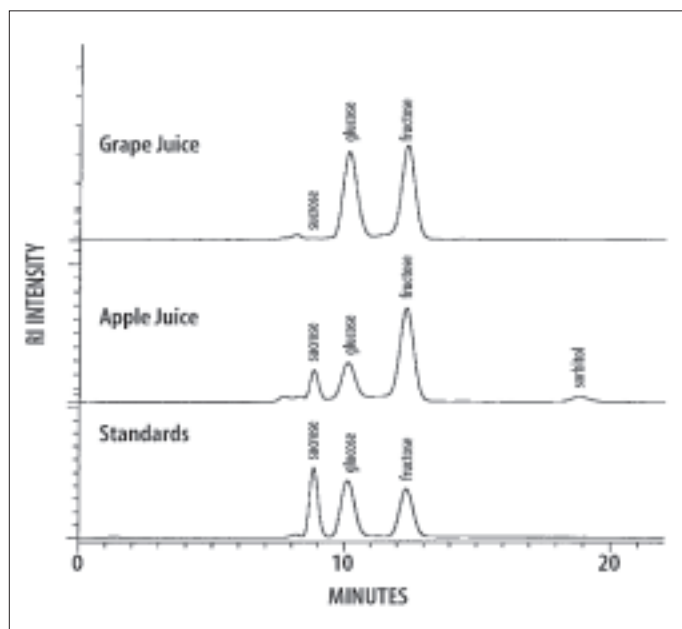


Figure 2. Analysis of sugars.

**Column:** Polypore CA (220 x 4.6 mm, 10  $\mu\text{m}$ ) with Polypore CA guard column (30 x 4.6 mm)  
**Detection:** RI  
**Mobile Phase:** Water  
**Flow Rate:** 0.2 mL/min at 75  $^{\circ}\text{C}$ , 100 psi  
**Sample:** 10  $\mu\text{L}$  of standard or juice sample diluted 1:4 in water

## Specifications

Detection type	Deflection-microprocessor control
Light source	Tungsten
Range (RIU)	1.00-1.75
Interface	Keyboard/color LCD display
Noise (RIU)	$\pm 2.5 \times 10^{-9}$
Drift (RIU/h/ $^{\circ}\text{C}$ )	$\pm 2 \times 10^{-7}$
Flow cell	8 $\mu\text{L}$ volume, 50 psi backpressure rating
Thermostating	35 $^{\circ}\text{C}$ factory set. Adjustable to 50 $^{\circ}\text{C}$
Outputs	Integrator/computer (1 V); Recorder (10 mV)
Dimensions (H x W x D)	200 mm x 260 mm x 400 mm Bkg (27 lbs)

## Ordering Information

Part Number	Description
0271-1465	Series 200a Refractive Index Detector, 100-240 V, 50/60 Hz

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