Synthra Quality Control

Product Description and Technical Specifications

synthra

Synthra RadChromplus

(Catalog No. 021i & 021q)

Synthra RadChromplus is a compact radio-UV/Vis-HPLC system for routine quality control of any radiotracer. The user-friendly software Chromstar 7 allows the measurement of the chemical and radiochemical purity. Available are two basic modules: one with an isocratic pump and a second module with a quaternary gradient pump. Both modules can be upgraded individually.

General Features

√ Variable wavelength detector

- Baseline Noise: ± 1 × 10-5 AU (240 nm, 1 s risetime)
- Baseline Drift: 2 × 10-4 AU/h
- Wavelength range: 190 900 nm, accuracy: ± 2 nm
- Light source: Deuterium and tungsten lamp

√ Radioactivity detector

- ✓ Diode detector
 - ullet eta particle detector, no shielding required

√ NaI(TI) detector

- γ detector, 2" NaI(TI) well detector with
 5.5 cm lead shielding
- ✓ Online vacuum degasser
- √ Manual injection valve
- ✓ **Dimensions (w x d x h):** 42 × 55 × 23 cm (min. height without bottle tray)
- ✓ Weight: approx. 20 kg

GMP Features

- ✓ **GMP compliant.** Electronic control and data collection (27/18 channels)
- ✓ 21CFRpart11 & LIMS compatible



Terminal Control

- ✓ A laptop (Win 10 Pro) with preinstalled controlling software Chromstar 7 is included
- ✓ Password protected access to software

Additional Module Options

- → UV-detector upgrades: 2 channels or DAD
- → All wetted stainless steel parts including pump head are available in PEEK
- → Column selecting valve for up to four columns for measuring various tracer/nuclides with a single setup
- → Refraction index (RI) detector

Synthra Quality Control Product Description and Technical Specifications



Catalog No. 021i

√ Isocratic pump

- Micro: Flow rate 0.001 2 mL/min (0 400 bar)
- Analyt.: Flow rate 0.001 10 mL/min (0 400 bar)
- Pressure pulsation: typical < 1 bar or < 1 %
- One eluent solvent supply bottle

Catalog No. 021q

✓ Quaternary gradient pump

- Micro: Flow rate 0.001 2 mL/min (0 400 bar)
- Analyt.: Flow rate 0.001 10 mL/min (0 400 bar)
- Pressure pulsation: typical < 1 bar or < 1%
- Gradient Range: 0.0 100.0 %, 4 channels
- Gradient Accuracy: < 0.25 %
- · Active gradient mixing chamber
- Mixing volume: adjustable: 10 500 μL
- Four eluent solvent supply bottles