Versatile NMR Spectrometer For bench chemistry

With a Thermo Scientific[™] picoSpin[™] 45 spectrometer, routine Nuclear Magnetic Resonance (NMR) analysis of your reagents and reaction mixtures at your lab bench, in your fume hood, or in a glove box is now possible. Test for impurities, monitor reactions and analyze concentrations – take advantage of the power of NMR analysis when and where you need it most, in your lab.

- 45 MHz ¹H pulsed FT NMR spectrometer
- High performance, high resolution, lightweight and portable
- 4.8 kg (10.5 lbs) total weight
- 20.3 cm × 14.6 cm × 29.2 cm (8" × 5.75" × 11.5")
- Replaceable capillary cartridge
- 30 microliter sample volume
- Ethernet interface
- Web server GUI
- Includes a 1-yr Mnova[™] NMR suite license

Introducing the Thermo Scientific picoSpin 45 NMR spectrometer





Learn More About the picoSpin NMR

We provide innovative molecular spectroscopy solutions in NMR, FT-IR, Raman, NIR and UV-Vis tailored to meet your specific requirements – from quality control to analytical services, from teaching to academic research. Our commitment delivers you the best-in-the-industry for:

- High-quality instrumentation
- Trusted service and support
- Reliability and durability
- Easy-to-use products
- Design innovation
- Superior performance



Linalool (16 scans): ¹H NMR (44 MHz, Neat) δ 6.40–5.84 (d, J = 9.7 Hz, H), 5.84–5.37 (d, J = 9.9 Hz, 1H), 5.38–4.90 (m, 1H), 4.93–4.62 (m, 1H), 3.54–3.09 (s, 1H), 2.25–1.62 (m, 4H), 1.66–1.36 (d, J = 3.0 Hz, 6H), 1.22–1.01 (s, 3H).

Visit us at www.thermoscientific.com/picospin to learn more about the picoSpin 45 NMR spectrometer



 $\begin{array}{l} \text{TTEGDA (36 scans): 'H NMR (44 MHz, Neat) \& 6.52-6.15} \\ (dd, J = 7.4, 3.0 \text{ Hz}, 2\text{H}), 6.09-5.70 (d, J = 6.2 \text{ Hz}, 4\text{H}), \\ 4.63-4.08 (dd, J = 5.9, 3.3 \text{ Hz}, 4\text{H}), 3.92-3.69 (d, J = 2.9 \text{ Hz}, 4\text{H}), \\ 3.70-3.52 (s, 8\text{H}). \end{array}$



Lidocaine (49 scans; 1 M in CDCl₃): ¹H NMR (44 MHz, CDCl₃) δ 9.09–8.63 (s, 1H), 7.25–6.74 (s, 3H), 3.43–2.94 (s, 2H), 2.98–2.33 (q, J = 7.0 Hz, 4H), 2.37–1.90 (s, 6H), 1.39–0.70 (t, J = 7.0 Hz, 6H).

8 7

Lidocaine

2-(diethylamino)-N-(2,6-dimethylphenyl) acetamide

(b)

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