BENCHTOP NMR FOR THE CHEMICAL INDUSTRY

Fourier 80 Multi-Talent One System. Infinite Insights.

Automate Your Entire Chemical Analysis Workflow - From Sample to Result

Innovation with Integrity

The Fourier 80 Multi-Talent benchtop NMR, combined with Bruker's Advanced Chemical Profiling (ACP) Software, enables high-field NMR experiments directly at the bench. Designed for chemists who need fast, reliable answers - not raw data - it automates the entire workflow from sample to report.

Whether you're working in polymers, coatings, lubricants, or advanced materials, the Fourier 80 delivers actionable insights across more nuclei than ever before - no expert interpretation required.

What you Gain:

- Analyze protons and 15 X-nuclei (^{2}H, ^{7}Li, ^{11}B, ^{13}C, ^{15}N, ^{19}F, ^{23}Na, ^{27}Al, ^{29}Si, ^{31}P, ^{51}V, ^{77}Se, ^{79}Br, ^{119}Sn, ^{129}Xe)
- Fully automated operation in tube or flow mode, in unison with variable sample temperatures
- Push-button identification and quantification with Advanced Chemical Profiling (ACP)

Performance at a Glance

- **Multi-Nuclei Capability** – Analyze complex materials beyond protons
- **Automated Workflow** – From acquisition to report, no expert needed
- **Actionable Results** – Visual summaries, insightful reports, not raw spectra

Ready to simplify your analysis?

Real-World Chemistry, Real-Time Answers

From polymers to agrochemicals, the Fourier 80 Multi-Talent empowers chemists to perform advanced NMR analysis across a wide range of applications - right at the bench. Automated multi-nuclei capabilities streamline workflows and deliver actionable insights in every sector.

Polymers

- Quantify molecular weight and co-polymer composition
- Analyze additives like boron (flame retardants), tin (stabilizers), and silicon (surface modifiers)

Flame Retardants

- Use phosphorus NMR to analyze structural features of flame retardants
- Combine with tin NMR to monitor the effectiveness and safety of halogenated materials containing zinc stannate

Coatings

- Monitor phosphorus species and oxidation states
- Identify nitrogen-based compounds and silicon-based defoamers

Catalysts

- Real-time monitoring of catalytic species like tin (II) chloride in elastomers and resins

Detergents

- Identify phosphorus, nitrogen, and sodium-based surfactants

Lubricants

- Analyze base oils and additives: amines, fluorinated compounds, boron-based lubricants

Advanced Materials

- Quality control of boron, silicon, and other functional elements

Agrochemicals

- Analyze nitrogen, boron, fluorine, and bromine in fertilizers and pesticides

Compatibility

- Integrates with ELNs, LIMS, and lab automation systems
- Compatible with Bruker's ACP Software for seamless reporting

With the Fourier 80 Multi-Talent and Advanced Chemical Profiling (ACP) Software, chemistry labs gain a powerful yet user-friendly solution that automates and simplifies complex NMR analysis. Whether in quality control, research, or production, this combination of multi-nuclei capability, automated workflows, and intuitive data interpretation enables faster decisions, greater consistency, and reduced reliance on analytical experts.

Trust in precise results - right from your benchtop.

Curious to see it in action?

Schedule a personalized demo and discover how the Fourier 80 Multi-Talent can transform your lab's workflow - no NMR expertise required.

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Customer Support
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