

**CIL**Cambridge Isotope Laboratories, Inc.  
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RESEARCH PRODUCTS

# NMR Reference Standards

CIL has an extensive offering of NMR reference standards



## NMR Reference Standards

As the leading supplier of NMR reference standards to the world's largest NMR manufacturers, CIL has an extensive offering of NMR reference standards. Accompanied by a complete technical data package, these standards help to assure proper spectrometer performance. CIL's total quality assurance protocols and in-house manufacturing capabilities guarantee the highest standard of quality the first time and every time. These NMR Reference Standards have been evaluated and determined to meet or exceed industry requirements. A representative listing of these NMR Reference Standards is provided below. We also welcome your requests for custom formulations of other reference standards as well as alternate fill heights of existing reference standards. Please contact us if you require a reference standard that is not listed below. CIL routinely produces other reference standards which are generally available from stock.

### 1% 1,2-Dichlorobenzene in Acetone-d<sub>6</sub> (99.9%D)

DLM-79      Application: <sup>1</sup>H-Resolution      5mm x 8"

### 0.1% Ethylbenzene+ 0.01% TMS in Chloroform-d "100%" (99.96%D)

DLM-74      Application: <sup>1</sup>H-Sensitivity      5mm x 8"

**NEW**

### 0.1% Ethylbenzene in Chloroform-d (99.8%D)(540 PP Tube)

DLM-5008      Application: <sup>1</sup>H-Sensitivity      5mm x 8"

### 1% 3-Heptanone in Chloroform-d (99.8%D)

DLM-67      Application: <sup>1</sup>H APT Test      5mm x 8"

### 12% TMS in Chloroform

ULM-73      Application: <sup>1</sup>H-Reference/Calibration      5mm x 8"

### 5% Ethylbenzene + 2% TMS in Chloroform-d (99.8%D)

DLM-84      Application: <sup>1</sup>H-Sensitivity/Reference      5mm x 8"

### 1% Chloroform in Acetone-d<sub>6</sub> (99.9%D)

DLM-76      Application: <sup>1</sup>H-Line Shape      5mm x 8"

**0.1 mg/mL GdCl<sub>3</sub> • 6H<sub>2</sub>O in D<sub>2</sub>O (99.96%D)**DLM-90 Application: <sup>1</sup>H-Homogeneity 5mm x 8"**NEW 10% Ethylbenzene in Chloroform-d (99.8%D)(540 PP Tube)**DLM-5001 Application: <sup>13</sup>C-Sensitivity 5mm x 8"**40% p-Dioxane in Benzene-d<sub>6</sub> (99.6%D)(540 PP Tube)**DLM-72 Application: <sup>13</sup>C-Sensitivity/Resolution 5mm x 8"**30% Menthol in Chloroform-d (99.8%D)**DLM-66 Application: <sup>13</sup>C App Test 5mm x 8"**90% Formamide in DMSO-d<sub>6</sub> (99.9%D)**DLM-68 Application: <sup>15</sup>N-Sensitivity 5mm x 8"**0.0485 M Triphenyl phosphate in Chloroform-d (99.8%D)**DLM-77 Application: <sup>31</sup>P-Sensitivity 5mm x 8"**0.05% α,α,α,-Trifluorotoluene in Benzene-d<sub>6</sub> (99.6%D)**DLM-78 Application: <sup>19</sup>F-Sensitivity 5mm x 8"**0.1% Methanol-<sup>13</sup>C+0.3 mg/mL GdCl<sub>3</sub> in 98.9% D<sub>2</sub>O+1% H<sub>2</sub>O**

CDLM-100 Application: Auto Test Sample 5mm x 8"

**0.1 mg/mL GdCl<sub>3</sub>+0.1% DSS in 20% H<sub>2</sub>O in D<sub>2</sub>O**

DLM-88 Application: Gradient Shimming 5mm x 8"

**1% <sup>13</sup>CH<sub>3</sub>I, 0.2% Cr(acac)<sub>3</sub>+ 1% (CH<sub>3</sub>O)<sub>3</sub>P in Chloroform-d "100%" (99.6%D)**

CDLM-96 Application: Indirect Detection Test 5mm x 8"

**2% Benzamide (<sup>15</sup>N,98%+) 0.2% Cr(acac)<sub>3</sub> in DMSO-d<sub>6</sub> "100%" (99.96%D)**

DNLM-97 Application: Indirect Detection Test 5mm x 8"

**100% Ethylene Glycol**

ULM-71 Application: High Temperature Calibrant 5mm x 8"

**100% Methanol**

ULM-69 Application: Low Temperature Calibrant 5mm x 8"

**10% TMS in Methanol**

ULM-92 Application: Low Temperature Measurement 5mm x 8"

**0.1M Urea-<sup>15</sup>N + 0.1M Methanol-<sup>13</sup>C in DMSO-d<sub>6</sub> 100% (99.96%D)**

CDNLM-5003 Application: Indirect Detection Experiments 5mm x 8"

**NEW 2 MM Sucrose + 0.5 MM DSS + 2 MM NaN<sub>3</sub> in 90% H<sub>2</sub>O/10% D<sub>2</sub>O (H<sub>2</sub>O/D<sub>2</sub>O = v/v)**

DLM-91 Application: Water Suppression Test 5mm x 8"

**50mM Sodium Acetate +1% Water in Deuterium Oxide**

DLM-5032-50mL Application: Homogeneity Standard

**1% Water in Deuterium Oxide**

DLM-7005 Application: Homogeneity Standard