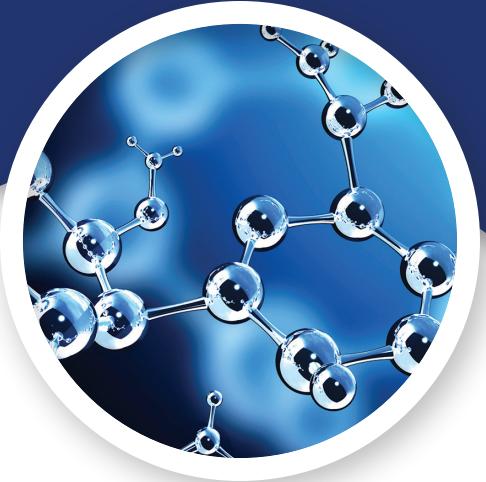


# Stable Isotope-Labeled Basic Starting Materials and Synthetic Intermediates



Cambridge Isotope Laboratories, Inc. (CIL) offers over 15,000 stable isotope-labeled products for your synthetic applications, including the manufacturing of APIs. Many labeling patterns are available for common starting materials. For more than 35 years, CIL has offered:

- Expertise and quality service from initial quote request through delivery
- Flexibility of scale for custom and catalog products from milligram to multi-kilogram quantities
- cGMP suite for manufacturing clinical trial grade materials (CTM)

Catalog No.	Description
CLM-173	Acetaldehyde ( $1,2\text{-}^{13}\text{C}_2$ , 99%)
DLM-112	Acetaldehyde-d <sub>4</sub> (D, 99%)
CLM-2483	Acetanilide (ring- $^{13}\text{C}_6$ , 99%)
CLM-105	Acetic acid ( $1,2\text{-}^{12}\text{C}_2$ , 99.95%)
DLM-12*	Acetic acid-d <sub>4</sub>
DLM-1556	Acetic acid-d (D, 98%)
CLM-1160	Acetic anhydride ( $2,2'\text{-}^{13}\text{C}_2$ , 99%)
CLM-1161	Acetic anhydride ( $1,1',2,2'\text{-}^{13}\text{C}_4$ , 99%)
DLM-1162	Acetic anhydride-d <sub>6</sub> (D, 98%)
CLM-1334	Acetone ( $^{13}\text{C}_3$ , 99%)
CLM-1306	Acetone ( $1,3\text{-}^{13}\text{C}_2$ , 99%)
CLM-245	Acetone ( $2\text{-}^{13}\text{C}$ , 99%)
DLM-9*	Acetone-d <sub>6</sub>
CLM-1242	Acetonitrile ( $1,2\text{-}^{13}\text{C}_2$ , 99%)
CLM-1260	Acetonitrile ( $1\text{-}^{13}\text{C}$ , 99%)
CLM-1588	Acetonitrile ( $2\text{-}^{13}\text{C}$ , 99%)
NLM-175	Acetonitrile ( $^{15}\text{N}$ , 98%+)
CDLM-6208	Acetyl chloride ( $^{13}\text{C}_2$ , 99%; D <sub>3</sub> , 98%)
CLM-246	Acetyl chloride ( $1\text{-}^{13}\text{C}$ , 99%)
CLM-703	Acetyl chloride ( $2\text{-}^{13}\text{C}$ , 99%)
CLM-704	Acetyl chloride ( $1,2\text{-}^{13}\text{C}_2$ , 99%)
DLM-247	Acetyl chloride-d <sub>3</sub> (D, 98%)
DLM-855	Acrylic-2,3,3-d <sub>3</sub> acid (D, 98%) (+ 0.1% 4-methoxyphenol) <5% H <sub>2</sub> O
NLM-177	Ammonium acetate ( $^{15}\text{N}$ , 98%+)

Catalog No.	Description
DLM-710*	Ammonium deuterioxide-d <sub>5</sub> (D, 99%) ~25% sol in D <sub>2</sub> O
NLM-1320	Ammonium hydroxide ( $^{15}\text{N}$ , 98%+) 3.3 N in H <sub>2</sub> O
NLM-3929	Ammonium hydroxide ( $^{15}\text{N}$ , 98%+) 6 N in H <sub>2</sub> O
CLM-714	Aniline ( $^{13}\text{C}_6$ , 99%)
CNLM-4805	Aniline ( $^{13}\text{C}_6$ , 98%+; $^{15}\text{N}$ , 98%+)
DLM-862	Aniline-ring-d <sub>5</sub> (D, 98%)
NLM-1314	Aniline ( $^{15}\text{N}$ , 98%+)
CLM-1337	Anisole (ring- $^{13}\text{C}_6$ , 99%)
CLM-466	Barium carbonate ( $^{13}\text{C}$ , 98%+)
CLM-180	Benzaldehyde (ring- $^{13}\text{C}_6$ , 99%) + 0.1% hydroquinone
CLM-182	Benzene ( $^{13}\text{C}_6$ , 99%)
DLM-1*	Benzene-d <sub>6</sub>
CLM-1813	Benzoic acid (ring- $^{13}\text{C}_6$ , 99%)
CLM-657	Benzoic acid (carboxyl- $^{13}\text{C}$ , 99%)
CLM-2298	Benzyl alcohol (ring- $^{13}\text{C}_6$ , 99%)
DLM-494	Biphenyl-d <sub>10</sub> (D, 98%)
DLM-1945	Bis(2-Chloroethoxy)-d <sub>8</sub> methane (D, 98%)
DLM-1315	Borane-d <sub>3</sub> (D, 98%) (1 molar in THF) + 0.005M NaBD <sub>4</sub>
DLM-4747	Borane-d <sub>3</sub> methylsulfide complex (D, 99%)
CLM-1339	Bromoacetic acid ( $1,2\text{-}^{13}\text{C}_2$ , 99%)
CLM-723	Bromoacetic acid ( $1\text{-}^{13}\text{C}$ , 99%)
CLM-724	Bromoacetic acid ( $2\text{-}^{13}\text{C}$ , 99%)
CLM-871	Bromobenzene ( $^{13}\text{C}_6$ , 99%)
DLM-398	Bromobenzene-d <sub>5</sub> (D, 99%)

\*Different grades are available with varying specifications. Please inquire for details.  
Chemical purity (CP) is 98% or greater, unless otherwise indicated.

Continued ➤

Catalog No.	Description
DLM-874	Bromoethane-d <sub>5</sub> (D, 98%)
DLM-181	1,4-Butanediol-2,2,3,3-d <sub>4</sub> (D, 98%)
DLM-1664	t-Butanol-d <sub>10</sub> (D, 98%)
DM-1116	t-Butyl chloride-d <sub>9</sub> (D, 98%)
CLM-730	Carbon disulfide ( <sup>13</sup> C, 97-99%)
CLM-185*	Carbon dioxide ( <sup>13</sup> C)
CLM-189*	Carbon monoxide ( <sup>13</sup> C)
HPG-040	Carbon monoxide (high purity) CP 99.99%
HPG-045	Carbon monoxide (high purity) CP 99.995%
CLM-1829	Chlorobenzene ( <sup>13</sup> C <sub>6</sub> , 99%)
DLM-263	Chlorobenzene-d <sub>5</sub> (D, 99%)
DLM-7*	Chloroform-d
DLM-337	Chloromethane-d <sub>3</sub> (D, 99%)
CNLM-7289	Cyanamide ( <sup>13</sup> C, 99%; <sup>15</sup> N <sub>2</sub> , 98%) stabilized with < 0.1% acetic acid
DLM-1560	Cyclohexanone-d <sub>10</sub> (D, 98%)
DLM-2781	Cyclopentyl bromide-d <sub>9</sub> (D, 98%)
DLM-1003*	Deuterium (D, 99.96%) <400 ppm HD
DLM-408*	Deuterium
DLM-458*	Deuterium chloride (D, 99%)
DLM-3*	Deuterium chloride (D, 99.5%) DCI 35% w/w solution in D <sub>2</sub> O
DLM-2	Deuterium chloride (D, 99.5%) DCI 20% w/w solution in D <sub>2</sub> O
DLM-4*	Deuterium oxide
CLM-1340	1,4-Dibromobenzene ( <sup>13</sup> C <sub>6</sub> , 99%)
DLM-195	1,2-Dibromoethane-d <sub>4</sub> (D, 99%)
DLM-158	1,2-Dichlorobenzene-d <sub>4</sub> (D, 99%)
CLM-1585	Diethyl acetamidomalonate (2- <sup>13</sup> C, 99%)
CNLM-6677	Diethyl acetamidomalonate (1,2,3- <sup>13</sup> C <sub>3</sub> , 99%; <sup>15</sup> N, 98%)
NLM-3421	Diethyl acetamidomalonate ( <sup>15</sup> N, 98%)
CLM-4324	Diethyl acetylenedicarboxylate (1,2,3,4- <sup>13</sup> C <sub>4</sub> , 99%)
CLM-3603	Diethyl malonate (1,2,3- <sup>13</sup> C <sub>3</sub> , 99%)
CLM-495	Diethyl malonate (2- <sup>13</sup> C, 99%)
CLM-521	Diethyl malonate (1,3- <sup>13</sup> C <sub>2</sub> , 99%)
CDLM-7163	Diethyl succinate (1,2,3,4- <sup>13</sup> C <sub>4</sub> , 99%; 2,2,3,3-D <sub>4</sub> , 98%)
CLM-1620	Diethyl succinate (1,2,3,4- <sup>13</sup> C <sub>4</sub> , 99%)
DLM-265	Dimethyl-d <sub>5</sub> -amine-HCl (D, 98%)
DLM-3903	Dimethyl carbonate-d <sub>6</sub> (D, 99%)
CLM-266	Dimethyl sulfate ( <sup>13</sup> C <sub>2</sub> , 99%)
DLM-196	Dimethyl sulfate-d <sub>6</sub> (D, 98%)
DLM-10*	Dimethyl sulfoxide-d <sub>6</sub>
DLM-25	N,N-Dimethylformamide-d <sub>1</sub> (D, 99.5%)
DLM-1670	N,N-Dimethylformamide (formyl-D, 98-99%)
DLM-16*	Ethanol-OD (D, 99%)
DLM-31*	Ethanol-d <sub>6</sub> (D, 99%)
DLM-9660	N-Ethylaniline-d <sub>10</sub> (D, 98%)
DLM-9626	N-Ethyl-d <sub>5</sub> -aniline (D, 98%)
DLM-347	Ethylene-d <sub>4</sub> (D, 98%)
CLM-1121	Ethyl acetate (2- <sup>13</sup> C, 99%)
CLM-1122	Ethyl acetate (1,2- <sup>13</sup> C <sub>2</sub> , 99%)
CLM-131	Ethyl acetate (1- <sup>13</sup> C, 99%)
CLM-3297	Ethyl acetoacetate (1,2,3,4- <sup>13</sup> C <sub>4</sub> , 99%)

Catalog No.	Description
CLM-1009	Ethyl bromoacetate (1- <sup>13</sup> C, 99%)
CLM-1010	Ethyl bromoacetate (2- <sup>13</sup> C, 99%)
CLM-1011	Ethyl bromoacetate (1,2- <sup>13</sup> C <sub>2</sub> , 99%)
CLM-4326	Fluorobenzene ( <sup>13</sup> C <sub>6</sub> , 99%)
CLM-806	Formaldehyde ( <sup>13</sup> C, 99%) ~20% w/w in H <sub>2</sub> O
DLM-805	Formaldehyde-d <sub>2</sub> (D, 98%) ~20% w/w in D <sub>2</sub> O
CDLM-4599	Formaldehyde ( <sup>13</sup> C, 99%; D <sub>2</sub> , 98%) 20% w/w in D <sub>2</sub> O
CLM-2032	Formamide ( <sup>13</sup> C, 99%)
DLM-743	Formic acid (formyl-D, 98%) <5% H <sub>2</sub> O
DLM-286	Formic acid-d <sub>2</sub> (D, 98%) <5% D <sub>2</sub> O
CDLM-6062	Fumaric acid (1- <sup>13</sup> C, 99%; 2,3-D <sub>2</sub> , 99%)
CLM-4454	Fumaric acid (1,4- <sup>13</sup> C <sub>2</sub> , 99%)
DLM-423	n-Heptane-d <sub>16</sub> (D, 98%)
NLM-352	Hydrazine sulfate ( <sup>15</sup> N <sub>2</sub> , 98%+)
NLM-426	Hydroxylamine-HCl ( <sup>15</sup> N, 98%+)
CLM-1892	Iodoethane (2- <sup>13</sup> C, 99%) + copper wire
CLM-741	Iodoethane (1,2- <sup>13</sup> C <sub>2</sub> , 99%) + copper wire
DLM-272	Iodoethane-d <sub>5</sub> (D, 99%) + copper wire
DLM-1023	Iodoethane-1,1-d <sub>2</sub> (D, 98%) + copper wire
DLM-1024	Iodoethane-2,2,2-d <sub>3</sub> (D, 98%) + copper wire
CLM-4714	Isopropanol (2- <sup>13</sup> C, 99%)
DLM-44	Isopropanol-d <sub>8</sub> (D, 99%)
DLM-6201	α-Ketoglutaric acid-3,3,4,4-d <sub>4</sub> (D, 98%) CP 90%
DLM-356	Lithium aluminum deuteride (D <sub>4</sub> , 98%)
DLM-1945	bis(2-Chloroethoxy)-d <sub>8</sub> methane (D, 98%)
DLM-1981	Methanesulfonic acid-d <sub>4</sub> (D, 97-98%)
CLM-359	Methanol ( <sup>13</sup> C, 99%)
DLM-15	Methanol-OD (D, 99%)
DLM-24*	Methanol-d <sub>4</sub>
CDLM-688	Methanol ( <sup>13</sup> C, 99%; D <sub>4</sub> , 99%)
CLM-360	Methylamine-HCl ( <sup>13</sup> C, 99%)
DLM-1500*	Methyl-d <sub>3</sub> -amine (D, 98%)
DLM-289	Methyl-d <sub>3</sub> -amine-HCl (D, 98%)
DLM-23	Methylene chloride-d <sub>2</sub> (D, 99.8%)
DLM-9707	Methyl-d <sub>3</sub> methanesulfonate (D, 98%)
DLM-651	Methyl formate (formyl-D, 99%)
CDLM-1037	Methyl iodide ( <sup>12</sup> C, 99.95%; D <sub>3</sub> , 99.5%) + copper wire
CDLM-1537	Methyl iodide ( <sup>13</sup> C, 99%; D <sub>3</sub> , 99%) + copper wire
CDLM-6015	Methyl iodide ( <sup>13</sup> C, 99%; D <sub>2</sub> , 98%) + copper wire
DLM-362	Methyl iodide (D <sub>3</sub> , 99.5%) + copper wire
CLM-287	Methyl iodide ( <sup>13</sup> C, 99%) + copper wire
DLM-3484	Morpholine-2,2,3,3,5,5,6,6-d <sub>8</sub> (D, 98%)
CLM-675	Nitrobenzene ( <sup>13</sup> C <sub>6</sub> , 99%)
NLM-1042	Nitrobenzene ( <sup>15</sup> N, 98%+)
CLM-1043	Nitromethane ( <sup>13</sup> C, 99%)
NLM-600	Nitromethane ( <sup>15</sup> N, 98%+)
DLM-295	2-Nitrophenol-ring-d <sub>4</sub> (D, 98%)
DLM-296	4-Nitrophenol-ring-d <sub>4</sub> (D, 98%)
DLM-619	Octanoic acid-d <sub>15</sub> (D, 98%)
CLM-2002	Oxalic acid (1,2- <sup>13</sup> C <sub>2</sub> , 99%)
CDLM-2702	Paraformaldehyde ( <sup>13</sup> C, 99%; D <sub>2</sub> , 98%)
CLM-229	Paraformaldehyde ( <sup>13</sup> C, 99%)
DLM-300	Paraformaldehyde-d <sub>2</sub> (D, 99%)

\*Different grades are available with varying specifications. Please inquire for details.  
Chemical purity (CP) is 98% or greater, unless otherwise indicated.

Catalog No.	Description
CLM-216	Phenol ( $^{13}\text{C}_6$ , 99%)
DLM-370	Phenol-d <sub>6</sub> (D, 98%)
OLM-1057	Phosphoric acid ( $^{18}\text{O}_4$ , 96%) 80-85% in $^{18}\text{O}$ water
DLM-788	Phthalic anhydride-d <sub>4</sub> (D, 98%)
NLM-6081	Phthalimide ( $^{15}\text{N}$ , 98%+)
DLM-9813	Pivalic acid-trimethyl-d <sub>9</sub> (D, 98%)
CLM-297	Potassium cyanide ( $^{13}\text{C}$ , 99%)
CNLM-1961	Potassium cyanide ( $^{13}\text{C}$ , 99%; $^{15}\text{N}$ , 98%+)
NLM-111	Potassium cyanide ( $^{15}\text{N}$ , 98%+)
NLM-367	Potassium phthalimide ( $^{15}\text{N}$ , 98%+)
DLM-3078*	<i>N</i> -Propanol-d <sub>7</sub> (D, 98%)
DLM-9662	Pyrrolidine-2,2,3,3,4,4,5,5-d <sub>8</sub> (D, 98%)
DLM-226	Sodium borodeuteride-d <sub>4</sub> (D, 99%) CP 95%
CLM-378	Sodium cyanide ( $^{13}\text{C}$ , 99%) CP 96%
NLM-3005	Sodium cyanide ( $^{15}\text{N}$ , 98%+) CP 96%
DLM-45*	Sodium deuterioxide (D, 99.5%) 40% in D <sub>2</sub> O
CDLM-6203	Sodium formate ( $^{13}\text{C}$ , 99%; D, 98%)
CLM-583	Sodium formate ( $^{13}\text{C}$ , 99%)
DLM-1361	Sodium formate (D, 98%)

Catalog No.	Description
NLM-658	Sodium nitrite ( $^{15}\text{N}$ , 98%+)
CLM-2440	Sodium pyruvate ( $^{13}\text{C}_3$ , 99%)
DLM-8206	Sodium 2,2-dimethyl-2-silapentane-5-sulfonate-d <sub>6</sub> (DSS) (D, 98%)
CLM-1084	Succinic acid (1,4- $^{13}\text{C}_2$ , 99%)
CLM-1199	Succinic acid (2,3- $^{13}\text{C}_2$ , 99%)
CLM-2473	Succinic anhydride (1,2,3,4- $^{13}\text{C}_4$ , 99%)
DLM-33*	Sulfuric acid-d <sub>2</sub> (D, 99%) 96-98% in D <sub>2</sub> O
DLM-36	Tetrahydrofuran-d <sub>8</sub> (D, 99.5%)
DLM-2729	Tetramethylsilane-d <sub>12</sub> (D, 98%)
CLM-6069	Toluene (ring- $^{13}\text{C}_6$ , 99%)
DLM-5*	Toluene-d <sub>8</sub> (D, 99.5%)
CLM-4833	Triethyl orthoacetate (1,2- $^{13}\text{C}_2$ , 99%)
CLM-3742	Triethyl orthoformate (formyl- $^{13}\text{C}$ , 99%)
DLM-46*	Trifluoroacetic acid-d
NLM-1697	Uric acid (1,3- $^{15}\text{N}_2$ , 98%+)

*Multiple sizes and quantity discounts are available;  
please inquire.*

Please visit [isotope.com/products](http://isotope.com/products) → synthetic intermediates  
for a complete listing of isotope-labeled basic starting materials.



CIL products are distributed and sold worldwide via our extensive network.

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telephone: 1.978.749.8000

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email: [intlsales@isotope.com](mailto:intlsales@isotope.com)

telephone: +1.978.749.8000

CIL's distributor listing is available at: [www.isotope.com](http://www.isotope.com)



Euriso-Top, Parc des Algorithmes, route de l'orme, 91190 Saint Aubin | France

tel: +33 1 69 41 97 98

fax: +33 1 69 41 93 52

+49 (0) 681 99 63 338 (Germany)

[www.eurisotop.com](http://www.eurisotop.com)