Note: Most compounds are available individually. Please scroll down to see the components in n-alkane mixtures marked in the 3 rightmost columns.

	Note: Most compounds are ava	ilable individu	ally. Please scroll down to se	e the components in <i>n</i> -alka	ne mixtures marked in	the 3 rightmost columns.	
Carbon number	Version 5 April 2025 Individual <i>n</i> -alkanes formula, CAS #, purity, amount, type of packaging, price in US \$	tructure	δ^2 H (or δ D) (mean value in % vs. VSMOW, ± 1 σ) (range) (# of measurements)	δ ¹³ C (mean value in ‰ vs. VPDB, ± 1σ) (range) (# of measurements)	Composition of <i>n</i> -alkane mixture A7 C16-C30 (mg in 0.5 mL hexane; US \$250) see chromatogram	Composition of <i>n</i> -alkane mixture B5 C16-C30 (mg in 0.5 mL hexane; US \$250) see chromatogram	Composition of <i>n</i> -alkane mixture C4 C17-C25 (mg in 0.5 mL hexane; US \$250) see chromatogram
1	Methane #1, CH ₄ , CAS # 74-82-8, ca. 10 cm ³ at atmospheric pressure in sealed glass tube (outer diameter 9 mm), US \$250	CH ₄	-160.8 ± 2.1 ‰ from -158.8 to -164.2 ‰ n = 9	-38.25 ± 0.03 ‰ from -38.23 to -38.30 ‰ n = 6			
1	Methane #2, CH ₄ , CAS # 74-82-8, ca. 10 cm ³ at atmospheric pressure in sealed glass tube (outer diameter 9 mm), US \$250	CH ₄	- 41.3 ± 1.3 ‰ from -39.7 to -42.6 ‰ n = 4	-37.60 ± 0.03 ‰ from -37.57 to -37.62 ‰ n = 3			
1	Methane #3, CH ₄ , CAS # 74-82-8, ca. 10 cm ³ at atmospheric pressure in sealed glass tube (outer diameter 9 mm), US \$250	CH ₄	+2.2 ± 1.2 ‰ from +0.4 to +3.7 ‰ n = 6	+19.86 ± 0.05 ‰ from +19.81 to +19.94 ‰ n = 5			
1	Methane #5, CH ₄ , CAS # 74-82-8, ca. 10 cm ³ at atmospheric pressure in sealed glass tube (outer diameter 9 mm), US \$250	CH ₄	-69.8 ± 2.5 ‰ from -66.0 to -73.6 ‰ n = 6	$\begin{array}{c} \textbf{-22.44} \pm 0.03 \ \text{\%} \\ \text{from -22.40 to -22.48 \ \text{\%}} \\ n = 7 \end{array}$			
1	Methane #6, CH ₄ , CAS # 74-82-8, ca. 10 cm ³ at atmospheric pressure in sealed glass tube (outer diameter 9 mm), US \$250	CH ₄	-153.0 ± 2.0 ‰ from -150.6 to -155.2 ‰ n = 5	- 39.40 ± 0.02 ‰ from -39.38 to -39.42 ‰ n = 6			
2	Ethane #2, $G_2 \Pi_6$, 2 99 %, CAS # 74-64-	н —С—Н Н	-31.6 ± 1.1 ‰ from -30.2 to -32.6 ‰ n = 5	-25.50 ± 0.01 ‰ from -25.48 to -25.51 ‰ n = 4			
2	5	н —С—Н Н	+100.1 ± 2.7 ‰ from +95.5 to +102.7 ‰ n = 5	- 11.39 ± 0.02 ‰ from -11.37 to -11.42 ‰ n = 5			
3	Propane #1, C ₃ H ₈ , ≥ 99 %, CAS # 74-98- H 6, ≥ 5 milligrams sealed in glass tube (outer diameter 9 mm), US \$250 H		-165.9 ± 1.4 ‰ from -165.1 to -167.5 ‰ n = 3	-33.29 ± 0.03 ‰ from -33.26 to -33.32 ‰ n = 3			
5	n-Pentane, C ₅ H ₁₂ , CAS # 109-66-0, 99+ %, 1 mL sealed under argon in glass ampoule, US \$250	\sim	- 117.5 ± 1.0 ‰ from -116.1 to -118.9 ‰ n = 6	-27.19 ± 0.02 ‰ from -27.17 to -27.22 ‰ n = 4			
8	n-Octane, C ₆ H ₁₈ , CAS # 111-65-9, 99+ %, 1 mL sealed under argon in glass ampoule, US \$250	$\sim \sim$	-77.6 ± 0.7 ‰ from -76.5 to -78.4 ‰ n = 7	-31.75 ± 0.01 ‰ from -31.74 to -31.77 ‰ n = 4			
12	Dodecane #1, C12 n -alkane #1, C1 ₂ H ₂₆ , CAS # 112-40-3, only in older mixtures CH ₃ ((CH ₂) ₁₀ CH ₃	-62.5 ± 2.2 ‰ from -60.2 to -64.7 ‰ n = 4	- 31.99 ± 0.04 ‰ from -31.94 to -32.04 ‰ n = 6			
12	Dodecane #2, C12 n-alkane #2, C12H26, CAS # 112-40-3, 0.5 milliliter sealed CH3(under argon in glass ampoule, US \$250 CH3((CH ₂) ₁₀ CH ₃	-84.5 ± 0.4 ‰ from -84.2 to -85.1 ‰ n = 4	-32.00 ± 0.03 ‰ from -31.95 to -32.03 ‰ n = 5			
14	Tetradecane, C14 <i>n</i> -alkane, C ₁₄ H ₃₀ , CAS # 629-59-4, ≥ 5 mg in sealed glass capillary, US \$250	(CH ₂) ₁₂ CH ₃	-71.7 ± 1.4 ‰ from -69.3 to -73.5 ‰ n = 6	-30.69 ± 0.03 ‰ from -30.67 to -30.72 ‰ n = 3			
15	sealed glass capillary, US \$250	(CH ₂) ₁₃ CH ₃	- 88.4 ± 1.2 ‰ from -86.7 to -90.9 ‰ n = 10	-29.25 ± 0.01 ‰ from -29.25 to -29.26 ‰ n = 3			
15	sealed glass capillary, US \$250	(CH ₂) ₁₃ CH ₃	-85.8 ± 2.2 ‰ from -83.2 to -88.0 ‰ n = 7	-29.93 ± 0.02 ‰ from -29.91 to -29.97 ‰ n = 5			L
16	sealed glass capillary, US \$250	(CH ₂) ₁₄ CH ₃	-9.1 ± 1.4 ‰ from -7.9 to -11.1 ‰ n = 7	-26.15 ± 0.02 ‰ from -26.13 to -26.17 ‰ n = 5	0.701	0.140	
16	Hexadecane #3, USGS67, C16 <i>n</i> - alkane #3, C ₁₆ H ₃₄ , ≥ 99 %, CAS # 544- 76-3, ≥ 50 μ L in sealed glass capillary, US \$275	[CH ₂) ₁₄ CH ₃	-166.2 ± 1.0 ‰ n = 163 (<i>Anal. Chem.</i> , 2016, 88, 4294. http://dx.doi.org/10.1021/acs.analchem. 5b04392)	-34.50 ± 0.05 ‰ n = 99 (Anal. Chem., 2016, 88, 4294. http://dx.doi.org/10.1021/acs.analchem .5b04392)			
16	3, ≥ 50 μL in sealed glass capillary, US \$275	(CH ₂) ₁₄ CH ₃	-10.2 ± 0.9 ‰ n = 147 (<i>Anal. Chem.</i> , 2016, 88, 4294. http://dx.doi.org/10.1021/acs.analchem. 5b04392)	-10.55 ± 0.04 ‰ n = 91 (<i>Anal. Chem.</i> , 2016, <i>88</i> , 4294. http://dx.doi.org/10.1021/acs.analchem .5b04392)			
16	$\begin{array}{l} \mbox{Hexadecane \#C, USGS69, C16 n-} \\ \mbox{alkane \#C, C_1,$H_{34}, contains spikes of 1-} \\ \mbox{2^{H} and $1,$2$,13C_2$,$ $9 $9, $CAS \# $544-76-$ \\ \mbox{3, $$50 μL in sealed glass capillary, US $$275$ } \end{array}$	(CH ₂) ₁₄ CH ₃	+381.4 ± 3.5 ‰ n = 132 (<i>Anal. Chem.</i> , 2016, <i>88</i> , 4294. http://dx.doi.org/10.1021/acs.analchem. 5b04392)	-0.57 ± 0.04 ‰ n = 86 (<i>Anal. Chem.</i> , 2016, <i>88</i> , 4294. http://dx.doi.org/10.1021/acs.analchem .5b04392)			
17	Heptadecane #2, C17 n-alkane #2, C17 H ₃₆ , CAS # 629-78-7, ≥ 5 mg in sealed glass capillary, US \$250	(CH ₂) ₁₅ CH ₃	- 121.2 ± 0.5 ‰, from -120.9 to -122.0 ‰; n = 5	- 31.87 ± 0.02 ‰ from -31.84 to -31.90 ‰ n = 8	0.701	0.280	0.702
18	Octadecane #1, C18 n -alkane #1, $C_{18}H_{38}$, CAS # 593-45-3, \geq 5 mg in sealed glass capillary, US \$250CH3	(CH ₂) ₁₆ CH ₃	- 53.8 ± 2.1 ‰ from -50.9 to -55.7 ‰ n = 4	- 31.11 ± 0.02 ‰ from -31.08 to -31.14 ‰ n = 8			
18	sealed glass capillary, US \$250	(CH ₂) ₁₆ CH ₃	-52.0 ± 1.1 ‰ from -50.6 to -53.5 ‰ n = 5	-32.70 ± 0.01 ‰ from -32.69 to -32.72 ‰ n = 5	0.700	0.420	
19	Nonadecane #2, C19 n -alkane #2, C ₁₉ H ₄₀ , CAS # 629-92-5, ≥ 5 mg in CH ₃ (sealed glass capillary, US \$250	CH ₂) ₁₇ CH ₃	-56.3 ± 1.0 ‰ from -55.0 to -57.5 ‰ n = 5	- 31.99 ± 0.01 ‰ from -31.98 to -32.02 ‰ n = 6	0.700	0.560	0.701

Carbon number	Version 5 April 2025 Individual n -alkanes formula, CAS #, purity, amount, type of packaging, price in US \$	Structure	δ^2 H (or δ D) (mean value in ‰ vs. VSMOW, ± 1σ) (range) (# of measurements)	δ ¹³ C (mean value in ‰ vs. VPDB, ± 1σ) (range) (# of measurements)	Composition of <i>n</i> -alkane mixture A7 C16-C30 (mg in 0.5 mL hexane; US \$250) see chromatogram	Composition of <i>n</i> -alkane mixture B5 C16-C30 (mg in 0.5 mL hexane; US \$250) see chromatogram	Composition of <i>n</i> -alkane mixture C4 C17-C25 (mg in 0.5 mL hexane; US \$250) see chromatogram
20	Eicosane #1, icosane #1, C20 <i>n</i> - alkane, C ₂₀ H ₄₂ , CAS # 112-95-8, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₁₈ CH ₃	- 52.6 ± 0.8 ‰ from -51.6 to -53.7 ‰ n = 5	- 32.35 ± 0.04 ‰ from -32.31 to -32.39 ‰ n = 4			
20	Eicosane #2, icosane #2, C20 n - alkane, C ₂₀ H ₄₂ , CAS # 112-95-8, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₁₈ CH ₃	-89.7 ± 1.7 ‰ from -87.3 to -91.2 ‰ n = 4	- 33.97 ± 0.02 ‰ from -33.93 to -33.98 ‰ n = 6			
20	Eicosane #3, icosane #3, C20 n - alkane, C ₂₀ H ₄₂ , CAS # 112-95-8, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₁₈ CH ₃	-176.6 ± 1.6 ‰ from -174.5 to -179.3 ‰ n = 9	- 40.91 ± 0.02 ‰ from -40.89 to -40.94 ‰ n = 7	0.700	0.700	
20	Eicosane #4, icosane #4, C20 n - alkane, C ₂₀ H ₄₂ , CAS # 112-95-8, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₁₈ CH ₃	-49.6 ± 2.1 ‰ from -47.2 to -52.3 ‰ n = 4	-31.88 ± 0.02 ‰ from -31.85 to -31.90 ‰ n = 7			
20	Eicosane #5 , icosane #5 , C20 <i>n</i> - alkane, C ₂₀ H ₄₂ , CAS # 112-95-8, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₁₈ CH ₃	-185.0 ± 2.3 ‰ from -181.9 to -187.3 ‰ n = 5	-40.90 ± 0.01 ‰ from -40.896 to -40.904 ‰ n = 3			
21	Heneicosane #2, C21 <i>n</i> -alkane #2, C ₂₁ H ₄₄ , CAS # 629-94-7, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₁₉ CH ₃	-181.6 ± 0.6 ‰, from -180.7 to -182.3 ‰; n = 5	-28.83 ± 0.02 ‰ from -28.81 to -28.85 ‰ n = 5	0.701	0.140	0.699
21	Heneicosane <mark>#3</mark> , C21 <i>n</i> -alkane #3, C ₂₁ H ₄₄ , CAS # 629-94-7, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₁₉ CH ₃	-205.3 ± 2.5 ‰ from -202.3 to -207.9 ‰ n = 6	-29.40 ± 0.02 ‰ from -29.38 to -29.43 ‰ n = 5			
22	Docosane #1, C22 <i>n</i> -alkane #1 , C ₂₂ H ₄₆ , CAS # 629-97-0, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₀ CH ₃	-62.8 ± 1.6 ‰ from -60.9 to -64.9 ‰ n = 6	- 32.87 ± 0.03 ‰ from -32.84 to -32.91 ‰ n = 5			
22	Docosane <mark>#2, C22 <i>n</i> -alkane #2, C₂₂H₄₆,</mark> CAS # 629-97-0, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₀ CH ₃	- 81.3 ± 1.8 ‰ from -79.4 to -83.2 ‰ n = 5	-33.77 ± 0.02 ‰ from -33.75 to -33.79 ‰ n = 4			
22	Docosane #3, C22 <i>n</i> -alkane #3, C ₂₂ H ₄₆ , CAS # 629-97-0, ≥ 5 mg in sealed glass capillary, US \$250	$CH_3(CH_2)_{20}CH_3$	-68.2 ± 1.8 ‰ from -65.7 to -70.4 ‰ n = 5	-34.89 ± 0.02 ‰ from -34.87 to -34.92 ‰ n = 6		0.280	
22	Docosane #4, C22 <i>n</i> -alkane #4 , C ₂₂ H ₄₆ , CAS # 629-97-0, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₀ CH ₃	- 158.7 ± 0.9 ‰ from -157.1 to -160.0 ‰ n = 6	-29.19 ± 0.03 ‰ from -29.15 to -29.23 ‰ n = 5			
22	Docosane #M, C22 <i>n</i> -alkane #M, C ₂₂ H ₄₆ , CAS # 629-97-0, available only in mixture A7	CH ₃ (CH ₂) ₂₀ CH ₃	-74.8 ± 1.8 ‰ from -72.6 to -76.8 ‰ n = 5	-34.33 ± 0.02 ‰ from -34.31 to -34.36 ‰ n = 5	0.700		
23	Tricosane #2, C23 <i>n</i> -alkane #2, C ₂₃ H ₄₈ #1, CAS # 638-67-5, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₁ CH ₃	-67.2 ± 1.1 ‰ from -65.6 to -68.6 ‰ n = 6	-33.37 ± 0.03 ‰ from -33.33 to -33.40 ‰ n = 5	0.700	0.420	0.703
23	Tricosane #3, C23 <i>n</i> -alkane #3, C ₂₃ H ₄₈ #1, CAS # 638-67-5, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₁ CH ₃	-65.6 ± 2.0 ‰ from -63.2 to -68.3 ‰ n = 6	-33.34 ± 0.01 ‰ from -33.33 to -33.36 ‰ n = 6			
23	Tricosane #4, C23 <i>n</i> -alkane #4, C ₂₃ H ₄₈ #1, CAS # 638-67-5, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₁ CH ₃	-68.7 ± 1.0 ‰ from -67.3 to -69.6 ‰ n = 6	-33.34 ± 0.01 ‰ from -33.32 to -33.36 ‰ n = 5			
24	Tetracosane #1, C24 <i>n</i> -alkane #1, C ₂₄ H ₅₀ , CAS # 646-31-1, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₂ CH ₃	-53.0 ± 1.6 ‰ from -50.7 to -54.5 ‰ n = 4	-33.34 ± 0.02 ‰ from -33.32 to -33.36 ‰ n = 6			
24	Tetracosane #2 , C24 <i>n</i> -alkane #2 , C ₂₄ H ₅₀ , CAS # 646-31-1, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₂ CH ₃	-29.7 ± 1.5 ‰ from -28.2 to -31.8 ‰ n = 6	-32.13 ± 0.02 ‰ from -32.11 to -32.16 ‰ n = 6	0.701	0.560	
25	Pentacosane #3, C25 <i>n</i> -alkane #3, C ₂₅ H ₅₂ , CAS # 629-99-2, available only as part of mixtures	CH ₃ (CH ₂) ₂₃ CH ₃	-254.1 ± 1.5 ‰ from -252.0 to -256.1 ‰ n = 5	-28.48 ± 0.02 ‰ from -28.45 to -28.51 ‰ n = 7			0.702
25	Pentacosane #4, C25 <i>n</i> -alkane #4, C ₂₅ H ₅₂ , CAS # 629-99-2, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₃ CH ₃	-258.9 ± 0.8 ‰ from -258.1 to -260.0 ‰; n = 5	-28.46 ± 0.02 ‰ from -28.42 to -28.48 ‰ n = 7	0.700	0.700	
25	Pentacosane <mark>#5</mark> , C25 <i>n</i> -alkane #5 , C ₂₅ H ₅₂ , CAS # 629-99-2, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₃ CH ₃	-189.3 ± 1.5 ‰ from -187.5 to -191.1 ‰ n = 5	-31.57 ± 0.01 ‰ from -31.55 ‰ to -31.58 ‰ n = 5			
26	Hexacosane <mark>#2, C26 <i>n</i> -alkane #2,</mark> C ₂₆ H ₅₄ , CAS # 630-01-3, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₄ CH ₃	-45.9 ± 1.0 ‰ from -44.4 to -46.7 ‰ n = 5	-32.94 ± 0.01 ‰ from -32.92 to -32.95 ‰ n = 8	0.700	0.140	
27	Heptacosane #1, C27 n-alkane #1, C ₂₇ H ₅₆ , CAS # 593-49-7, available only in older mixtures	$CH_3(CH_2)_{25}CH_3$	-227.3 ± 2.0 ‰ from -225.‰ to -229.6 ‰ n = 3	-28.61 ± 0.02 ‰ from -28.59 to -28.65 ‰ n = 6			
27	Heptacosane #2, C27 n-alkane #2, C ₂₇ H ₅₆ , CAS # 593-49-7, available only in some <i>n</i> -alkane mixtures	CH ₃ (CH ₂) ₂₅ CH ₃	- 178.2 ± 2.5 ‰ from -173.8 to -181.5 ‰ n = 9	-29.56 ± 0.01 ‰ from -29.55 to -29.57 ‰ n = 4			
27	Heptacosane <mark>#3</mark> , C27 n-alkane <mark>#3</mark> , C ₂₇ H ₅₆ , CAS # 593-49-7, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₅ CH ₃	-172.8 ± 1.6 ‰ from -170.6 to -175.1 ‰ n = 6	-30.49 ± 0.01 ‰ from -30.47 to -30.50 ‰ n = 5	0.701		
27	Heptacosane #4, C27 n-alkane #4, C ₂₇ H ₅₆ , CAS # 593-49-7, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₅ CH ₃	-205.2 ± 1.6 ‰ from -203.5 to -207.6 ‰; n = 6	-31.11 ± 0.01 ‰ from -31.11 to -31.12 ‰ n = 5		0.280	
28	Octacosane #2, C28 <i>n</i> -alkane #2, C ₂₈ H ₅₈ , CAS # 630-02-4, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₆ CH ₃	-36.8 ± 1.3 ‰ from -35.6 to -38.9 ‰ n = 5	- 33.20 ± 0.01 ‰ from -33.20 to -33.20 ‰ n = 5	0.700	0.420	
29	Nonacosane #1, C29 n -alkane #1, C ₂₉ H ₆₀ , CAS # 630-03-5, available only in older n -alkane mixtures	CH ₃ (CH ₂) ₂₇ CH ₃	-179.3 ± 2.7 ‰ from -177.0 to -183.0 ‰ n = 5	- 31.08 ± 0.02 ‰ from -31.06 to -31.10 ‰ n = 3			

Carbon number	Version 5 April 2025 Individual n -alkanes formula, CAS #, purity, amount, type of packaging, price in US \$	Structure	δ ² H (or δ D) (mean value in ‰ vs. VSMOW, ± 1σ) (range) (# of measurements)	δ ¹³ C (mean value in ‰ vs. VPDB, ± 1σ) (range) (# of measurements)	Composition of <i>n</i> -alkane mixture A7 C16-C30 (mg in 0.5 mL hexane; US \$250) see chromatogram	Composition of <i>n</i> -alkane mixture B5 C16-C30 (mg in 0.5 mL hexane; US \$250) see chromatogram	Composition of <i>n</i> -alkane mixture C4 C17-C25 (mg in 0.5 mL hexane; US \$250) see chromatogram
29	Nonacosane #3, C29 <i>n</i> -alkane #3, C ₂₉ H ₆₀ , CAS # 630-03-5, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₇ CH ₃	- 177.8 ± 1.3 ‰ from -176.0 to -179.7 ‰ n = 10	-29.10 ± 0.01 ‰ from -29.08 to -29.11 ‰ n = 5	0.700		
29	Nonacosane #4, C29 <i>n</i> -alkane #4, C ₂₉ H ₆₀ , CAS # 630-03-5, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₇ CH ₃	-162.6 ± 2.2 ‰ from -160.6 to -165.0 ‰ n = 4	-29.30 ± 0.02 ‰ from -29.27 to -29.32 ‰ n = 5		0.560	
29	Nonacosane #5 , C29 <i>n</i> -alkane #5 , C ₂₉ H ₆₀ , CAS # 630-03-5, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₇ CH ₃	- 85.4 ± 1.4 ‰ from -82.9 to -86.8 ‰ n = 6	-31.83 ± 0.02 ‰ from -31.80 to -31.85 ‰ n = 5			
30	Triacontane #1, C30 <i>n</i> -alkane #1, C ₃₀ H ₆₂ , CAS # 638-68-6; available only in older <i>n</i> -alkane mixtures	CH ₃ (CH ₂) ₂₈ CH ₃	- 46.3 ± 2.1 ‰ from -42.1 to -49.4 ‰ n = 8	-33.15 ± 0.02 ‰ from -33.13 to -33.18 ‰ n = 9			
30	Triacontane #2, C30 <i>n</i> -alkane #2, C ₃₀ H ₆₂ , CAS # 638-68-6; available only as a component of mixtures	CH ₃ (CH ₂) ₂₈ CH ₃	-213.4 ± 1.2 ‰ from -211.8 to -215.0 ‰ n = 8	-29.86 ± 0.01 ‰ from -29.86 to -29.87 ‰ n = 4			
30	Triacontane #3, C30 <i>n</i> -alkane #3, C ₃₀ H ₆₂ , CAS # 638-68-6; ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₈ CH ₃	-213.6 ± 2.4 ‰ from -210.5 to -216.1 ‰ n = 6	-29.84 ± 0.01 ‰ from -29.82 to -29.85 ‰ n = 5	0.701		
30	Triacontane #4, C30 <i>n</i> -alkane #4, C ₃₀ H ₆₂ , CAS # 638-68-6; ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₈ CH ₃	-41.5 ± 0.7 ‰ from -40.9 to -42.9 ‰ n = 6	-33.14 ± 0.02 ‰ from -33.12 to -33.16 ‰ n = 6		0.700	
31	Hentriacontane, C31 <i>n</i> -alkane, C ₃₁ H ₆₄ , CAS # 630-04-6, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₂₉ CH ₃	-271.9 ± 2.0 ‰ from -268.7 to -274.1 ‰ n = 9	-29.43 ± 0.01 ‰ from -29.41 to -29.44 ‰ n = 5			
32	Dotriacontane, C32 <i>n</i> -alkane, C ₃₂ H ₆₆ , CAS # 544-85-4, \geq 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₀ CH ₃	-212.4 ± 1.0 ‰ from -211.5 to -213.3 ‰ n = 4	-29.47 ± 0.02 ‰ from -29.45 to -29.50 ‰ n = 6			
33	Triatriacontane #1, C33 <i>n</i> -alkane #1, C ₃₃ H ₆₈ , CAS # 630-05-7; ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₁ CH ₃	-207.0 ± 1.7 ‰ from -204.7 to -208.6 ‰ n = 5	-28.36 ± 0.01 ‰ from -28.36 to -28.37 ‰ n = 5			
34	Tetratriacontane, C34 <i>n</i> -alkane, C ₃₄ H ₇₀ , CAS # 14167-59-0, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₂ CH ₃	-231.8 ± 1.4 ‰ from -230.0 to -233.4 ‰ n = 4	-29.54 ± 0.02 ‰ from -29.53 to -29.56 ‰ n = 5			
35	Pentatriacontane #1 , C35 <i>n</i> -alkane #1 , C ₃₅ H ₇₂ , CAS # 630-07-9, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₃ CH ₃	-194.8 ± 0.9 ‰ from -193.3 to -195.7 ‰ n = 5	-29.84 ± 0.01 ‰ from -29.84 to -29.85 ‰ n = 3			
35	Pentatriacontane #2 , C35 <i>n</i> -alkane #2 , C ₃₅ H ₇₂ , CAS # 630-07-9, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₃ CH ₃	- 179.3 ± 1.9 ‰ from -177.1 to -181.7 ‰ n = 4	-30.48 ± 0.02 ‰ from -30.46 to -30.51 ‰ n = 5			
36	Hexatriacontane #2, C36 n -alkane #2, C ₃₆ H ₇₄ , CAS # 630-06-8, 100 mg in crimp-sealed glass vial, US \$250	CH ₃ (CH ₂) ₃₄ CH ₃	-259.2 ± 1.3 ‰ from -257.5 to -261.0 ‰ n = 7	-29.95 ± 0.02 ‰ from -29.92 to -29.97 ‰ n = 8			
37	Heptatriacontane, C37 <i>n</i> -alkane, C ₃₇ H ₇₆ , CAS # 7194-84-5, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₅ CH ₃	-180.1 ± 1.8 ‰ from -177.4 to -181.5 ‰ n = 4	-30.24 ± 0.03 ‰ from -30.21 to -30.27 ‰ n = 4			
38	Octatriacontane, C38 <i>n</i> -alkane, C ₃₈ H ₇₈ , CAS # 7194-85-6, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₁₆ CH ₃	-102.6 ± 1.3 ‰ from -101.7 to -104.0 ‰ n = 3	-31.49 ± 0.01 ‰ from -31.47 to -31.50 ‰ n = 5			
39	Nonatriacontane, C39 <i>n</i> -alkane, C ₃₉ H ₈₀ , CAS # 7194-86-7, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₇ CH ₃	-218.6 ± 2.3 ‰ from -215.2 to -221.7 ‰ n = 10	-28.68 ± 0.01 ‰ from -28.67 to -28.69 ‰ n = 4			
40	Tetracontane, C40 <i>n</i> -alkane, C ₄₀ H ₈₂ , CAS # 4181-95-7, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₈ CH ₃	-106.7 ± 0.3 ‰ from -106.4 to -107.0 ‰ n = 3	-32.20 ± 0.04 ‰ from -32.16 to -32.25 ‰ n = 4			
41	Hentetracontane #2, C41 <i>n</i> -alkane #2, C ₄₁ H ₈₄ , CAS # 7194-87-8, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₃₉ CH ₃	-196.5 ± 2.0 ‰ from -194.0 to -199.4 ‰ n = 5	-29.23 ± 0.02 ‰ from -29.21 to -29.25 ‰ n = 5			
44	Tetratetracontane #1, C44 <i>n</i> -alkane #1, C ₄₄ H ₉₀ , CAS # 7098-22-8, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₄₂ CH ₃	-199.9 ± 2.0 ‰ from -197.7 to -201.6 ‰ n = 3	-29.12 ± 0.02 ‰ from -29.10 to -29.15 ‰ n = 5			
44	Tetratetracontane #2, C44 <i>n</i> -alkane #2, C ₄₄ H ₉₀ , CAS # 7098-22-8, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₄₂ CH ₃	- 199.8 ± 1.3 ‰ from -198.6 to -201.5 ‰ n = 6	-29.07 ± 0.02 ‰ from -29.05 to -29.10 ‰ n = 4			
50	Pentacontane, C50 <i>n</i> -alkane, C ₅₀ H ₁₀₂ , CAS # 6596-40-3, ≥ 5 mg in sealed glass capillary, US \$250	CH ₃ (CH ₂) ₄₈ CH ₃	- 191.3 ± 1.0 ‰ from -190.6 to -192.0 ‰ n = 2	-27.79 ± 0.03 ‰ from -27.77 to -27.83 ‰ n = 6			
n	Polyethylene powder, USGS77 , low density, 1000 μm, CAS # 9002-88-4, 1 g in glass vial, US \$275	(CH ₂ CH ₂) _n	-75.9 ± 0.6 ‰ n = 199 (<i>Anal. Chem.</i> , 2016, <i>88</i> , 4294. http://dx.doi.org/10.1021/acs.analchem. 5b04392)	-30.71 ± 0.04 ‰ n = 81 (<i>Anal. Chem.</i> , 2016, 88, 4294. http://dx.doi.org/10.1021/acs.analchem .5b04392)			
n	Polyethylene line NDF-PE77 (extruded from powder USGS77; isotopically indistinguishable from powder), low density, CAS # 9002-84-4, inquire about availability or contact Tamim Darwish (ndf-enquiries@ansto.gov.au)	(CH ₂ CH ₂) _n	indistinguishable from USGS77 (see above) (Anal. Chem., 2016, 88, 4294. http://dx.doi.org/10.1021/acs.analchem. 5b04392)	indistinguishable from USGS77 (see above) (Anal. Chem., 2016, 88, 4294. http://dx.doi.org/10.1021/acs.analchem .5b04392)			