

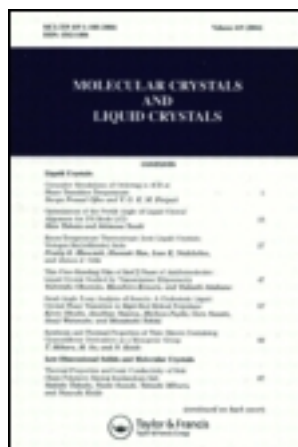
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Steroid derivatives

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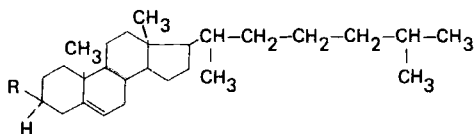
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STEROID DERIVATIVES

1. Cholesteryl derivatives

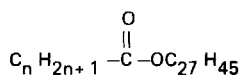


• 3 β -halogen 5 α -cholesten

R	K	N _r	B.P	I	Ref.
Cl (1)	• 96.5 4.9	•	[66.5] 0.09	•	68
	• 95.1 4.9	•	[65.3] 0.004	• [65.7] 0.061	220

(1) Nr from ref. 90.

• 3 β -n alkanoyloxy- 5 α -cholesten



n	K	S	N*	I	Ref.
O (1)	• 98 5.40	—	• [59.9] - 0.082	•	1,91

n	K	S	N*	I	Ref.
1 (1)	• 114 6.77	—	• [95.4] 0.14	•	1, 91
	• 114.6 4.89	•			1, 93
	• 116.0 4.78	—	• [94.5]	•	1, 54 (2)
	• 114.0 113.5 4.80	•	?	•	225 (6)
2 (1)	• 98 5.61	—	• 114.1 0.12	•	1, 91
	• 97.2 5.89	—	• 113.0 0.075	•	1, 93
	• 100 5.5	—	• 114 0.13	•	1, 68
	• 99.6 5.21	—	• 114.1 0.165	•	95
	• 98.8 4.89	—	• 111.2 0.134	•	53
	• 99 5.98	—	• 114	•	54 (2)
3 (1)	• 100 5.26	—	• 111 0.15	•	1, 54
	• 98.9 4.35	—	• 114.2 0.045	•	53
4	• 88 5.26	—	• 96 0.14	•	1, 54
	• 86 4.6	—	• 100 0.006	•	222 (5)
5	• 98 7.17	—	• 99 0.17	•	1, 54
	• 97.8 5.9	—	• 99 0.137	•	53
6	• 113 7.69	—	• [92.7] 0.12	•	1, 91
	• 109 8.13	—	• [92]	•	1, 54

n	K	S	N*	I	Ref.
7 (1)	• 110.5 8.14	—	• [94.7] 0.16	•	1, 91
	• 104 8.60	—	• [92.0]	•	1, 54
8 (1)	• 80.5 5.60	• [76.3] 0.11	• 92.1 0.18	•	1, 91
	• 77.8 5.48	• —	• 91.7 0.12	•	1, 93
	• 80 7.65	• [76] 0.18	• 91 0.16	•	1, 54
	• 79.5 6.0	• [76.5] 0.08	• 92.5 0.13	•	1, 68
	• 79.6 6.305	• [76.1] 0.37	• 90.7 0.76	•	53 (3)
	• 78.1 6.14	• [76] 0.04	• 91.5 0.08	•	220 (4)
9 (1)	• 85.5 7.40	• [79.0] 0.15	• 90.9 0.18	•	1, 91
	• 82 10.5	• [80] 0.20	• 91 0.25	•	1, 54
	• 84 7.4	• [79.5] 0.09	• 91.5 0.20	•	68
	• 83.6 8.75	• [80] 0.173	• 91 0.204	•	53 (3)
10	• 92.5 9.05	• [81.9] 0.25	• 90.0 0.24	•	1, 91
	• 85 10.0	• [80] 0.15	• 89 0.22	•	1, 54
	• 84.5 8.311	• [79.9] 0.146	• 89.5 0.189	•	53 (3)

n	K	S	N*	I	Ref.
11 (1)	• 92 7.82	• [92.1] 0.26	• [89.2] 0.30	•	1, 91
	• 91.3 7.9	• [81.4] 0.34	• [88.6] 0.325	•	95
	• 91.5 9.3	• [81.5]	• [89]	•	54 (2)
	• 90 7.5	• [80.8] 0.22	• [88.3] 0.15	•	220 (4)
12	• 63.5 9.68	• 78.8 0.31	• 84.8 0.26	•	1, 91
13 (1)	• 71.0 11.36	• 79.1 0.43	• 84.6 0.36	•	95
	• 70 11	• 78.5 0.32	• 83.5 0.25	•	1, 68
	• 73.6 11.2	• 79.5 0.34	• 85.5 0.26	•	1, 96 bis
	• 72 13.4	• 78 0.39	• 84 0.33	•	1, 54
	• 73.6 10.04	• 79.7 0.28	• 85.5 0.22	•	92
	• 71.5 10.4	• 79.9 0.31	• 85.2 0.25	•	1, 91
	• 70.8 11.548	• 79.0 0.309	• 84.1 0.174	•	53 (3)
	• ?	• 78 0.34	• 84	•	163 2,3
	• 70.7 11.0	• 79 0.30	• 84.5 0.15	•	220 (4)
14	• 70 11.7	• 78.3 0.39	• 82.9 0.26	•	1, 91

n	K	S	N*	I	Ref.
15 (1)	• 76 17.0	• [72] 0.44	• 79 0.41	•	1, 54 (2)
	• 77.5 13.69	• [76.4] 0.41	• 82.0 0.32	•	1, 97
	• 77.5 14.2	• 78.1 0.39	• 82.6 0.29	•	1, 91
	• 76.6 14.5	• [74.1] 0.37	• 78.9 0.188	•	53 (3)
	• 79 9.81	—	• 85 0.40	•	222
16	• 78 15.2	• [76.5] 0.45	• 80.6 0.32	•	1, 91
	• 78.9 14.85	• [76.9] 0.498	• 82.2 0.368	•	1, 98
	• 76.3 13.2	• —	• 79.7 0.30	•	93
17 (1)	• 81.8 16.8	• [69.6] 0.39	• [74.4] 0.39	•	102
	• 82.0 13.9	• [71.2] 0.37	• [75.5] 0.43	•	
	• 82 20.6	• [73]	• [77]	•	1, 54
18	• 82 17.2	• [74.2] 0.45	• [77.8] 0.38	•	1, 91
20	• 85 18.2	• [74.3] 0.46	• [78.1] 0.40	•	1, 91

(1) N* = Ng from ref. 90.

(2) From graphically presented results.

(3) In this reference, S is identified as S_A.

(4) In the compounds, blue phases B.P. have been detected and their enthalpies of transition measured.

(5) Temperatures of transition extrapolated from graphs.

(6) From ref. 225 a crystal-crystal transition is given : K₁ 75 or 68 K₂
2.0 2.1

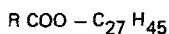
n	N*	BP I	BP II	I	Ref.
8 ¹	• 91.0 0.004	• 91.3 # 0.004	• 91.45 0.13	•	190
	• 91.0 0.005	—	• 91.5 0.08	•	220
11	• [87.9] 0.006	—	• [88.3] 0.15	•	220
12 ²	• 84.0 0.008	• 84.4 # 0.008	• 84.55 0.26	•	190
	• 84.0 0.006	— 0.15	• 84.5	•	220

(1) From ref. 221 only values of ΔH are given :

$$\Delta H_{N \rightarrow BP} = 0.004, \Delta H_{BP \rightarrow I} = 0.13 ;$$

(2) From ref. 221 $\Delta H_{N \rightarrow BP} = 0.008, \Delta H_{BP \rightarrow I} = 0.26$.

• 3 β -n alkenoyloxy-5 α -cholesten

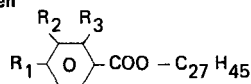


R	K	S	N*	I	Ref.
$CH_3-CH=CH-$	• 112.8 5.91	—	• 162 0.30	•	1, 99
$C_8H_{17}-CH=CH-C_7H_{14}-$	• 50.0 7.3	• [41.8] 0.24	• [46.4] 0.12	•	1, 102
	• 50.5 5.6	• [42.0] 0.36	• [47.5] 0.16	•	102
	• 45 5.27	• 46.6 0.24	• 51.5 0.16	•	220 (1)
$C_5H_{11}-CH=CH-CH_2-CH=CH-C_7H_{14}-$	• 42.6 7.13	• [34.0] 0.35	• [35.1] 0.13	•	1, 102
	• 42.0 5.2	• [34.0] 0.51	• [36.5] 0.18	•	102
$CH_3-(CH_2-CH=CH-)_3-C_7H_{14}-$	• 348	• [33.0] 0.44	• [34.8] 0.10	•	1, 102
	• 35.5 4.0	• [27.5] 0.49	• [29.0] 0.71	•	102

(1) From ref. 220, blue phase has been detected and the enthalpy of the transition N*—BP measured :

N* 51 BP
0.006

• 3 β -substituted-benzoyloxy-5 α -cholesten

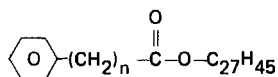


R ₁	R ₂	R ₃	K	S _C [*]	N [*]	I	Ref.
CH ₃ O	H	H	• 179.2 8.44	—	• 264.9 0.29	•	1, 102
			• 181.0	—	• 267.0 0.186	•	199 b
Br	H	H	• 175.3 6.44	• 241.8 0.058	• 245.3 0.17	•	103
			• 177.6	•	• 251.6 0.159	•	199 b
Cl	H	H	• 165.0 7.10	—	• 240.0 0.16	•	103
			• 170.1	—	• 252.8 0.184	•	199 b
H	Cl	H	• 144.4 7.28	• [137.4] 0.041	• [142.0] 0.15	•	103
H	H	Cl	• 96.03 7.01	—	• 144.18 0.11	•	103
F	H	H	• 153.9 7.72* (1) 7.29	—	• 229.8 0.21	•	191
			• 150.7	—	• 193.1 0.121	•	199 b
H	F	H	• 154.5 9.78* (1) 6.71	—	• 171.5 0.20	•	191
H	H	F	• 141.8 7.07* (1) 5.83	—	• 173.1 0.13	•	191

R ₁	R ₂	R ₃	K	N*	i	Ref.
CH ₃	H	H	•	183.9	• 243.1 0.183	• 199 b
CF ₃	H	H	•	160.8	• 194.6 0.113	• 199 b
H	H	H	•	154.4	• 179.9 0.124	• 199 b
			•	145.8 5.30	• 180.7 0.17	• 1, 99, 103
HOOC—	H	H	•	169.8 9.47	• [95.4] 0.60	• 1, 99
 —N=N—	H	H	•	192.4 7.08	• [184.5]	• 1, 99

(1) Values obtained on first heating — Ref. 191.

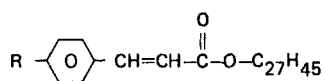
• 3 β -[ω -phenyl-alkanoyloxy]-cholesten



n	K	S	N*	I	Ref.
0 (1)	• 150.5 7.82	—	• 182.6 0.16	•	1, 91, 104
1	• 120.5 6.85	—	—	•	1, 91, 104
2	• 111.5 8.77	—	• 114.1 0.12	•	1, 91, 104
3	• 90.9 6.74	—	• [26.1] 0.02	•	1, 91, 104
4	• 98.3 7.5	—	• [91.3] 0.15	•	1, 91, 104
5	• 81.3 6.63	—	• [45.2] 0.07	•	1, 91, 104
6	• 97.4 9.46	—	• [82.7] 0.19	•	1, 91, 104
7	• 91.2 9.17	• [34.7] 0.14	• [56.6] 0.084	•	1, 91, 104
8	• 108.0 10.41	—	• [73.4] 0.19	•	104
9	• 74.3 8.78	• [35.9] 0.12	• [55.0] 0.082	•	104
10	• 81.2 9.05	—	• [69.8] 0.22	•	104
11	• 68.4 9.32	• [44.0] 0.17	• [59.9] 0.15	•	104
12	• 72.6 10.72	• [46.6] 0.11	• [65.6] 0.34	•	104
13	• 63.4 10.16	• [48.4] 0.27	• [61.2] 0.19	•	104
14	• 73.1 11.87	• [51.1] 0.18	• [66.3] 0.42	•	104
15	• 53.1 13.90	• [51.3] 0.28	• [61.9] 0.23	•	104

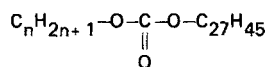
(1) N* = N_r from ref. 90

- 3 β - [trans-3-(4 subst.-phenyl)-propenoyloxy] - 5 α -cholesten



R	K		N*		I	Ref.
H	•	162.6 6.87	•	215.2 0.17	•	1, 99, 103
Cl	•	146.2 5.12	•	262.4 0.20	•	103

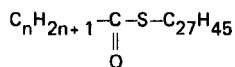
• 3 β -n-alkyloxycarboxyloxy-5 α cholesten



n	K	S	N*	I	Ref.
1	• 114.0 8.02	—	• [110.9] 0.084	•	101
2	• 83.9 5.38	—	• 105.8 0.089	•	101
	• 83.7 5.05	—	• 105.7 0.17	•	95
3	• 98.8 6.29	—	• 101.0 0.10	•	101
4	• 80.2 6.08	—	• 94.0 0.10	•	101
5	• 106.3 7.67	—	—	•	101
6	• 108.3 7.74	—	—	•	101
7	• 88.0 6.48	—	• 81.3 0.084	•	101
8	• 54.8 5.60	• [35.4] 0.019	• 78.9 0.11	•	101
9	• 79.3 7.29	• [45.1]	• 77.2 0.11	•	101
10	• 76.6 7.41	• [48.7]	• 75.9 0.14	•	101
11	• 70.5 9.31	• [51.1] 0.093	• 74.4 0.15	•	101
12	• 61.7 10.59	• [51.7] 0.064	• 72.9 0.15	•	101
13	• 61.9 11.74	• [52.1] 0.12	• 71.3 0.20	•	101
14	• 68.7 13.75	• [52.9] 0.12	• 70.4 0.21	•	101

n	K		S		N*		I	Ref.
15	•	69.0 14.38	•	[53.9] 0.16	•	69.7 0.24	•	101
16	•	73.9 14.65	•	[54.9]	•	[69.2] 0.32	•	101
17	•	74.1 16.62	•	[55.5] 0.13	•	[68.6] 0.35	•	101
18	•	78.2 16.51	•	[55.6]	•	[67.7] 0.37	•	101
19	•	78.7 18.86	—		•	[67.1] 0.38	•	101
20	•	80.9 16.33	—		•	[65.9]	•	101

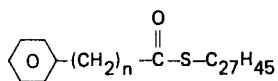
2. Thiocholesteryl derivatives

• 3 β -n-alkanoylmercapto 5- α cholesten

n	K	S	N*	I	Ref.
0	• 118 7.06	—	—	•	1, 91
	• 126 6.53	—	• [119.5] 0.071	•	1, 91
2	• 112 5.88	—	• [111.1] 0.059	•	1, 91
3	• 100 5.64	—	• 117.6 0.085	•	1, 91
4	• 91 5.7	—	• 104.7 0.058	•	1, 91
5	• 95 6.27	—	• 107.7 0.10	•	1, 91
6	• 107 7.78	• [73.1] 0.025	• 102.1 0.077	•	1, 91
7	• 97 6.93	• [76.6] 0.076	• 100.8 0.16	•	1, 91
8	• 69 5.34	• 84 0.14	• 97.5 0.12	•	1, 91
9	• 80 5.59	• 87.4 0.15	• 98.3 0.18	•	1, 91
10	• 81 6.25	• 88.1 0.25	• 95.0 0.15	•	1, 91
11	• 84 8.34	• 86.7 0.36	• 92.3 0.19	•	1, 91
12	• 80 8.33	• 86.5 0.31	• 91.4 0.15	•	1, 91
13	• 73 7.08	• 85.5 0.34	• 90.4 0.19	•	1, 91
14	• 62 8.73	• 84.3 0.37	• 88.3 0.20	•	1, 91

n	K	S	N*	I	Ref.
15	• 54 7.97	• 83.0 0.38	• 87.3 0.12	•	1, 91
	• 57 7.9	•	• 87.3 0.03	•	
16	• 66 10.2	• 81.2 0.40	• 85.0 0.20	•	1, 91
17	• 64 9.77	• 80.2 0.41	• 84.2 0.13	•	1, 91
18	• 74 9.94	• 78.3 0.40	• 82.4 0.13	•	1, 91
19	• 71 11.3	• 77.1 0.42	• 81.3 0.24	•	1, 91

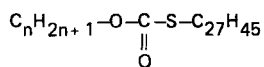
- 3 β -[$-\omega$ -phenyl-alkanoylmercapto]-cholesten



n	K	S	N*	I	Ref.
0	• 165.0 7.93	—	• 196.8 0.16	•	101 bis
	• 166.3 7.93	—	• 204.6 0.16	•	1, 105
	• 125.8 6.94			•	101 bis
1	• 124.6 6.94	—	—	•	1, 105
2	• 136.3 8.35		• 145.6 0.096	•	101 bis
	• 130.5 8.35	—	• 147.4 0.086	•	1, 105
3	• 98.4 8.46	—	—	•	1, 105
	• 98.2 8.46			•	101 bis
4	• 106.5 7.96		• 109.3 0.12	•	101 bis
	• 104.7 7.96	—	• [103.2] 0.12	•	1, 105
5	• 82.3 7.08	—	—	•	1, 105
	• 82.5 7.08			•	101 bis
	• 95.8 7.49		• [92.4] 0.13	•	101 bis
	• 95.1 7.49	—	• [93.9] 0.13	•	1, 105
7	• 69.8		• [34.8] 0.14	•	1, 105
	• 70 7.63	• [34.2]	• [36.3] 0.14	•	101 bis

n	K	S	N*	I	Ref.
8	• 83.5 9.80	• [46.9]	• 83.6 0.16	•	101 bis
9	• 52 7.27	• [39.8]	• [42.7] 0.16	•	101 bis
10	• 68.8 7.29	• [47.8]	• 76.3 0.17	•	101 bis
11	• 45.8 7.57	• [43.4] 0.18	• [48.3] 0.066	•	101 bis
12	• 67.8 10.50	• [48.7]	• 71.6 0.21	•	101 bis
13	• 51 8.04	• [47.3] 0.23	• 52.8 0.082	•	101 bis
14	• 61.1 12.80	• [51.1] 0.15	• 68.8 0.22	•	101 bis
15	• 56.6 9.01	• [49.4] 0.24	• [53.3] 0.116	•	101 bis
	• 54.6 9	•	• 55.3 0.011	•	100

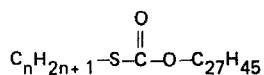
• 3 β -n-alkyloxycarbonylmercapto-5 α -cholesten



n	K	S	N*	I	Ref.
1	• 126.6 9.07	—	• [111.3] 0.05	•	106
2	• 132.2 6.97	—	• [109.0] 0.053	•	106
3	• 109.2 6.15	—	• [96.1] 0.040	•	106
4	• 101.7 6.07	• [35.0]	• [95.8] 0.066	•	106
5	• 96.0 5.83	• [56]	• [90.3] 0.083	•	106
6	• 95.3 6.55	• [65.9]	• [91.6] 0.098	•	106
7	• 92.5 6.90	• [65.6]	• [83.4] 0.082	•	106
8	• 87.7 7.17	• [66.6] 0.105	• [82.8] 0.103	•	106
9	• 76 5.75	• [70.2] 0.13	• 82.3 0.099	•	106
10	• 76.5 7.44	• [70.2] 0.133	• 82.3 0.132	•	106
11	• 87.7 9.16	• [70.4] 0.168	• [81.7] 0.127	•	106
12	• 92.5 9.46	• [69.1] 0.205	• [80.2] 0.182	•	106
13	• 79.4 8.21	• [67.9] 0.214	• [78.4] 0.172	•	106
14	• 78.5 10.33	• [67.3] 0.20	• [77.6] 0.192	•	106

n	K	S	N*	I	Ref.
15	• 84.4 10.68	• [66.3] 0.247	• [75.9] 0.167	•	106
16	• 82.8 9.99	• [65.3] 0.206	• [75.0] 0.194	•	106
17	• 70.6 12.5	• [64.3] 0.252	• 73.7 0.246	•	106
18	• 63.0 9.97	• 63.1 0.211	• 72.6 0.186	•	106
19	• 75.8 14.75	• [62.3] 0.261	• [71.3] 0.254	•	106
20	• 70.1 13.82	• [60.4] 0.280	• [70.2] 0.276	•	106

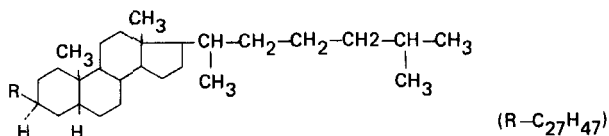
• 3 β n-alkylmercapto-carbonyloxy 5 α -cholesten



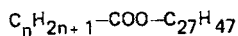
n	K	S	N*	I	Ref.
1	• 101.2 5.68	—	• 103.8 0.066	•	105
2	• 114.7 6.19	—	• [97.1] 0.061	•	105
3	• 97.9 4.35	—	• [90.3] 0.075	•	105
4	• 97.5 5.10	—	• [93.3] 0.074	•	105
5	• 92.9 6.46	• [40.3]	• [87.3] 0.069	•	105
6	• 94.1 6.76	• [58.0]	• [85.4] 0.11	•	105
7	• 61.0 5.6	• 68.2 0.091	• 84.2 0.12	•	105
8	• 80.9 4.78	• [69.8] 0.11	• 82.3 0.14	•	105
9	• 75.2 5.94	• [71.8] 0.15	• 79.3 0.16	•	105
10	• 78.1 6.89	• [71.3] 0.20	• 77.9 0.14	•	105
11	• 72.5 6.63	• [69.7] 0.23	• 74.8 0.15	•	105
12	• 60.6 4.87	• 65.2 0.33	• 71.6 0.17	•	105
13	• 55.2 8.22	• 63.6 0.21	• 69.3 0.19	•	105
14	• 59.4 4.90	• 60.8 0.17	• 67.6 0.18	•	105
15	• 62.7 8.85	• [61.9] 0.22	• 67.6 0.18	•	105

n	K		S		N*		I	Ref.
16	•	47.1 8.73	•	57.2 0.22	•	63.6 0.18	•	105
17	•	68.3 10.7	•	[55.8] 0.25	•	62.4 0.24	•	105
18	•	58.8 10.2	•	[57.3] 0.23	•	63.5 0.28	•	105
19	•	73.6 15.3	•	[54.1] 0.20	•	[60.6] 0.30	•	105
20	•	64.8 12.8	•	[54.2] 0.22	•	[60.4] 0.29	•	105

3. Cholestanyl derivatives

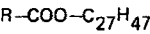


• 3 β -n-alkanoyloxy-5 α cholestan



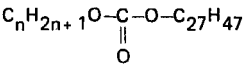
n	K	S	N*	I	Ref.
1	• 109 6.13	—	—	•	107
3	• 88 6.44	—	• [83] 0.084	•	107
5	• 87 7.07	—	• [69] 0.15	•	107
7	• 76 9.71	—	• [69] 0.26	•	107
9	• 81.5 2.2	• [53] 0.087	• [71-69] 0.34	•	107
11	• 87.5 3.6	• [58] 0.25	• [67] 0.40	•	107
13	• 91 15.4	• [61]	• [65]	•	107
17	• 97 19.9	—	—	•	107
19	• 99 22.6	—	—	•	107

• 3 β-n-alkanoyloxy-5 α-cholestan



R	K	S	N*	I	Ref.
C ₈ H ₁₇ -CH=CH-C ₇ H ₁₅ -	• 29 12.5	•	[19] 0.32	• [25] 0.32	• 107
C ₅ H ₁₁ -CH=CH-CH ₂ -CH=CH-C ₇ H ₁₅ -	•	•	13.0 0.84	• 13.5	• 107
CH ₃ -(CH ₂ -CH=CH-) ₃ C ₇ H ₁₅ -	•	•	8 0.71	• 11	• 107

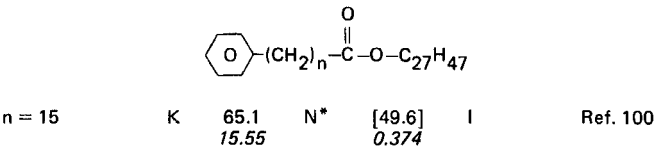
• 3 β-n-alkyloxycarbonyloxy-5 α-cholestan



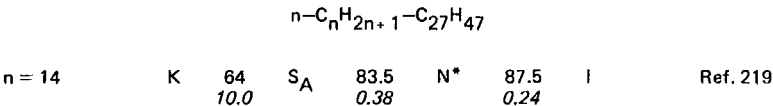
n	K	N*	I	Ref.
1	• 100.3 7.01	• [87.5] 0.095	•	1, 108
2	• 106.4 6.35	• [80.4] 0.14	•	1, 108
3	• 107.5 5.89	—	•	1, 108
4	• 88.4 7.85	• [69.4]	•	1, 108
5	• 73 6.97	• [65.2] 0.11	•	1, 108
6	• 69.2 7.08	• [60.6] 0.12	•	1, 108
7	• 51.6 6.48	• 61.4 0.12	•	1, 108
8	• 63.5 8.42	• [59.0] 0.14	•	1, 108
9	• 71.4 6.21	• [60.4] 0.18	•	1, 108

n	K		N*		I	Ref.
10	•	71.0 10.5	•	[59.8] 0.24	•	1, 108
11	•	66.2 10.9	•	[60.4] 0.24	•	1, 108
12	•	77.9 12.5	•	[60.6] ~0.19	•	1, 108
13	•	73.4 13.4	•	[58.6] 0.30	•	1, 108
14	•	81.2 12.2	•	[57.5]	•	1, 108
15	•	78.0 15.8	•	[57.9]	•	1, 108
16	•	84.1 14.8	—		•	1, 108
17	•	81.6 14.2	—		•	1, 108
18	•	90.6 18.7	—		•	1, 108
20	•	85.1 16.9			•	1, 108

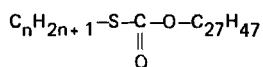
● 3 β {ω-phenyl-alkanoyloxy-} 5 α-cholestan



● 3 β-n-alkyl 5 α-cholestan



• 3 β -*n*-alkylmercapto carbonyloxy-5 α cholestan



$n = 15$

K

55.3
2.03

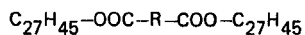
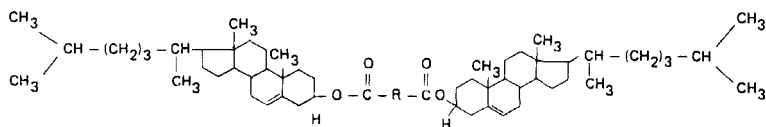
N*

56
0.059

I

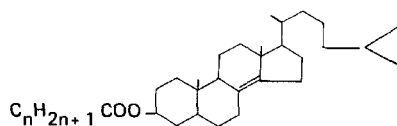
Ref. 100, 109

4. Dicholesteryl-ester



R	K	N*	I	Ref.
$-(\text{CH}_2)_4-$	• 195.5 7.0	• 225.5 0.86	•	1, 99
$-(\text{CH}_2)_8-$	• 179.1 10.6	• [175.6] 0.93	•	1, 99
	• 186.4 9.49	•	•	1, 99

5. 3 β -n-alkanoyloxy-5 α -cholest-8 (14)-en

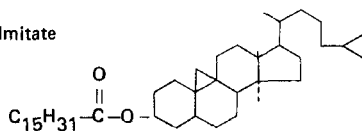


n	K	S	N*	I	Ref.
0	• 106.4 6.61	—	—	•	111
1	• 78.2 4.30	—	—	•	111
2	• 82.3 5.09	—	•	85.2 0.16	• 111
3	• 85.3 5.18	—	•	[77.3] 0.15	• 111
4	• 84.2 5.73	—	•	[67.4] 0.13	• 111
5	• 85.9 7.10	—	•	[68.0] 0.17	• 111
6	• 63.4 6.57	—	•	66.8	• 111
7	• 48.7 4.03	—	•	68.4 0.19	• 111
8	• 43.7 3.45	•	[40.1] 0.21	• 70.9 0.22	• 111
9	• 44.4 6.17	•	58.9 0.23	• 71.8 0.20	• 111
10	• 57.4 3.81	•	63.9 0.35	• 70.7 0.29	• 111
11	• 57.0 7.31	•	67.0 0.42	• 71.2 0.31	• 111
12	• 54.3 8.66	•	68.1 0.85	• 70.0 0.38	• 111
13	• 64.4 10.33	•	66.1 0.89	• 67.2 0.42	• 111

n	K		S		N*		I	Ref.
14	•	63.9 11.30	•	68.1 1.21	•	68.5 0.48	•	111
15	•	73.1 13.98	•	[67.8] 1.79	—		•	111
16	•	69.4 13.82	•	[66.9] 1.78	—		•	111
17	•	77.5 15.80	•	[66.7] 2.06	—		•	111

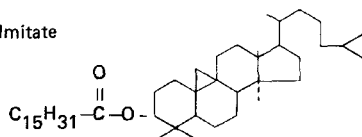
6. Others

— Pollinastanyl palmitate



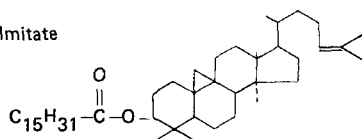
K	58.7 13.80	S	[44.4] 0.57	N*	[50.3] 0.48	I		Ref. 100, 110
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— Cycloartanyl palmitate



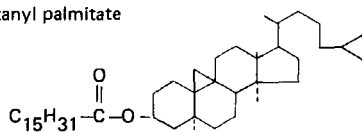
K	53.2 8.33	S	61.5 2.28	N*	68.9 3.24	I		Ref. 100, 110
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— Cycloartenyl palmitate



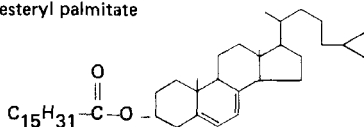
K	54.8 14.32	N*	[44.6] 0.48	I				Ref. 110
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— 31-Norcycloartanyl palmitate



K	67.7 10.48	S ₁	[55.5] 1.08	S ₂	[62.2] 2.12	N*	70.2 4.21	I	Ref. 110
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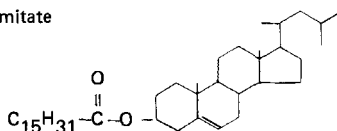
— 7-Dehydrocholesteryl palmitate



K	80.5	N*	99.3	I
	12.8		0.39	

Ref. 100, 109

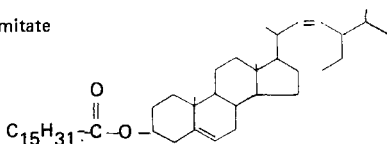
— Campesteryl palmitate



K	91.2	S	72.4	I
	15.7		1.38	

Ref. 100, 109

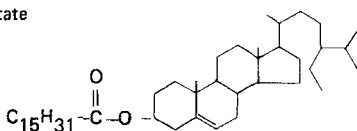
— Stigmasteryl palmitate



K	102.6	I
	17.95	

Ref. 100, 109

— Sitosteryl palmitate



K	91.2	I
	15.8	

Ref. 100, 109

— Lophenyl palmitate

K	75.5	N*	78.9	I
	13.45		0.40	

Ref. 100, 109