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Cholesteryl derivatives

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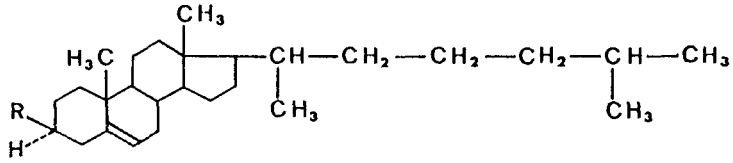
STEROIDS

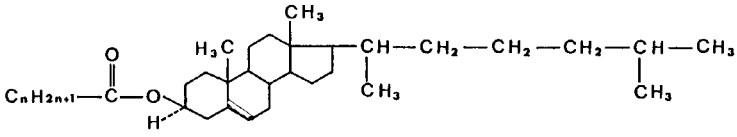
CHOLESTERYL DERIVATIVES

3β-Halogen-cholestene (5)



	R	K	N*	BP	I	Ref Ph	Ref Tr
4375	Cℓ	. 96.5	. [66.5]	—	.		38
		4.9	*0.009*				38
		26.5	22.8				32
		20.70	0.486				
		. 95.1	. [65.3]	. [65.7]	.		63
		26.5	0.0202	0.26			63
		R6.7	R4.9 10^{-3}	R0.063			63

3β-n-Alkanoyloxy-cholestenes (5)



	n	K	N*	I	Ref Ph	Ref Tr
4395	0	. 98	. [59.9]	.		33-34
		α3.3 *5.4*	*-0.089* α2.3		175	33-34
		χ8.6 28.8	25.8 χ10.4		175	32
		ρ0.9569 21.12	-0.433 ρ0.9506		175*	
		73 70	100 102			

		K_1	K_2	K_3	N^*	I	Ref Ph	Ref Tr
4396	1	. 40	. 90	.	. [92]	.		78
				. [95]	—	.		78
		3.17 α3.1		α3.7 18.64	α9.4 2.29	α6.8	78	78*
		ρ1.006 R0.5	R0.08	ρ0.982 R4.1	ρ0.982 R0.6		78*	78
		40		95	114			

	K	S	N^*	I	Ref Ph	Ref Tr
	. 114	—	. [95.4]	.		33-34
	α6.65		*0.14* α6.1		175	33-34
	χ8.3 *4.78*			χ9.9	175*	33-36
	ρ0.9434 31.65	18.86[a]	28.8	ρ0.9345	175*	32
	107 16.31		0.551	120		

a Monotropic S-N^* transition

	n	K	S	N*	I	Ref Ph	Ref Tr
4397	2	. 98	—	. 114.1	.		33-34
		5.5					33-38
				0.134			35
		27.2		18.86			32
		23.26		17.48			100
		24.55		**0.796**			
4398	3	. 98.9	—	. 114.2	.		35
				0.045			35
		5.26					33-36
		25.8		18.2		.	32
		20.79		15.5	$\rho_{122}^{0.9823}$	148	96
		25.37		**0.288**			
	4	. 88	—	. 96	.		33-36
		5.26					33-36
				0.006			130
		26.5		19.6			32
		25.8		18.10			83
				14.26			39
		23.28		**0.039**			
		. 79.6	. 93	102	.		39
		25.58	17.9				39
4400	5	98	—	. 99	.		33-36
		7.17		*0.17*			33-36
		27.2		19.6			35
				9.26			90
		25.35					90*
		29.69		**1.32**			
		~94	. 95	. 96.5 98 5	.		39
		27.47	21.38				39
4402	7	110.5	—	. [94.7]	.		33-34
				$\rho_{80}^{0.964}$	$\rho_{110}^{0.928}$		84*

	n	S	N*	BP	I	Ref Ph	Ref Tr
4403	8	. a [75.9]	. 90.9	. 91.4	.		63
			0.005	*0.08*			63
			22.06	22.08			209
			0.026	0.41			
		0.07	0.02	0.44			63
		R0.013	R3.7 10^{-3}	R0.078			63
		R0.015	R4 10^{-3}	R0.1			81
		K	**S**	**N***	**I**		
		. 80	. [76]	. 91	.		33-36
		5.6					33-34
			0.08	*0.18*			33-38
		α3 28.8		24.7	α7.2	63	40
		24.04 α3.8	38.25 α6.2	20.27		103*	72*
		22.04	44.59	23.83	$\chi^{\sim 6}_{115}$	103*	83*
		$\rho 1_{60}$ 20.9	ρ0.941 73	36.2 ρ0.937 80	22.61 ρ0.925 94	65*	24*
				45 ρ0.895 80	22 ρ0.876 100	84	239*
		27.68	**0.234**	**0.913**			
		33	**0.75**	**2.85**			65*
		R5.1	**R0.08**	**R0.3**			65
4404	9	. 85.5 . a	[79.0] .	90.9 .			33-34
			ρ0.946 82		ρ0.9285 110	85*	
		K	**S**	**N***	**BP**	**I**	
4406	11	. 89.9	. [80.7]	. [87.8]	. 88.2 .		63
		41.9	**0.79**	**0.039**	**0.79**		63
				0.04	**0.79**		85
		R7.23	**R0.13**	**R6.42 10^{-3}**	**R0.15**		63

a From ref.35 : smectic A

	n	K	S	N*	BP	I	Ref Ph	Ref Tr
4408	13	. 70.8	.b 79	.	83.9 .	84.4 .		63
			α10 0.92	α12.8	0.036 α18.8	0.76 α12	76	63
			1.07			0.9		76
			1.16[a]			0.97[a]		76
			RO.143	ρ0.921 83	R5.5 10^{-3}	ρ0.919 84 RO.117	76*	76
		K	S	N*		I		
		.	71 .	79.1	.	84.6 .		41
			11.2			*0.26*		33-143
				0.31				33-34
				35.97		25.06		223
		α3.29	38.08 α7.04	38.23	α11.2	27.6 α7.99	64	40
		ρ0.995 66.5	57.47 ρ0.9295 79	37.88	ρ0.9225 85	20.92	64*	72
			45.62	38.47		28.85		83
				40		25		239*
			28.91	**0.965**		**1.195**		
			36.72	**1.1**		**1.12**		64*
			38					40*
			R6.52					64
			R4.94	**RO.14**		**RO.17**		64
		K_1	K_2	S_A				
		. 69.8	—	.				223
			. 69.9	.				223
		36.76	27.86					223

a On cooling

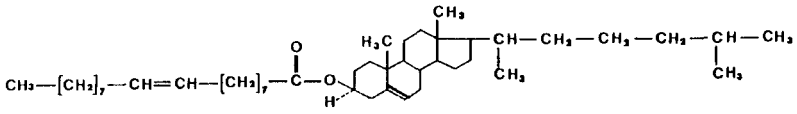
b From ref.223 : smectic A

	n	K	S	N*	I	Ref Ph	Ref Tr
4410	15	.	76 .a	[72] .	79 .		33-36
			0.81		*0.40*		130
				0.39			33-34
			39.69	43.84	27.89 $\rho 0.9075_{92}$	148	153
			29.59	2.57	1.7		
4412	17		81.8 .	[69.6] .	[74.4] .		145
		$\alpha 3.0$	*13.9*	$\alpha 10$	*0.43* $\alpha 8.1$	251	145
			35.71 $\chi_{ad}{}^{8}{}_{72}$	$\chi_{ad}{}^{9}{}_{77}$	40 $\chi_{ad}{}^{10.2}{}_{95}$	226*240*	234
			45.84		1.29		
			55		1.2 $\chi 6.9_{94}$	226*	234
		$\rho 0.96_{61}$	32.8	$\rho 0.913_{75}$	1.22 $\rho 0.908_{79}$	251*	251*
			R4.8 .		R0.17 $\rho 0.8977_{94}$	148	251
		.	73.54 –	.	77.46 .		153
			21.06		27.94		153

a From ref.35 : smectic A

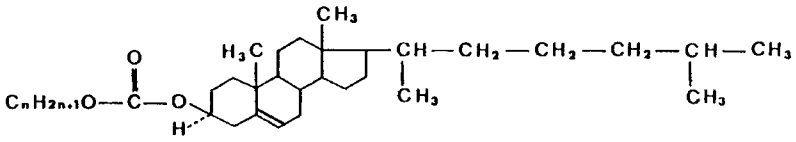
b From ref.226 : S[74]N*

3β-Alkenoyloxy-5α-cholestene



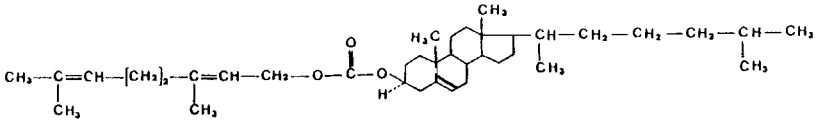
	K	S	N*	BP	I	Ref Ph	Ref Tr
4422	. 44.9	. 46.4	. 50.9	. 51.4	.		63
	20.61	0.92	0.03				63
	R3.06	R0.13	R3.68 10^{-3}	R0.07			63
	K	S	N*	I			
	. 45	. 45.4	. 50.7	.			77
		α10.32 43.48	α9.93 31.25	α7.55		77	108
		0.88	0.88				77
		0.73	0.49				108

3β-n-Alkoxycarbonyloxy-5α-cholestenes

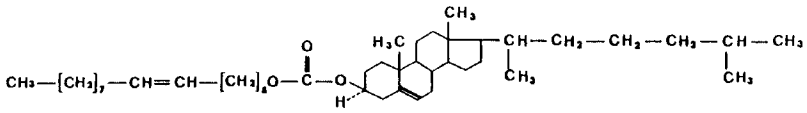


	n	K	N*	I	Ref Ph	Ref Tr
4444	1	. 114	. 110.9	.		37
		8.02	*0.089*			37
		30.6	18.9			32
		28.31	**0.512**			
4445	2	. 83.7	. 105.8	.		37
		5.38	*0.089*			37
		28.8	19.6			32
		21.89	**0.501**			
4446	3	. 98.8	. 101	.		37
		6.29	*0.10*			37
		39.7	18.2			32
		21.62	**0.614**			

3β-Di-methyl-3,7-octadien-2,6-yloxycarbonyloxy-5α-cholestenes

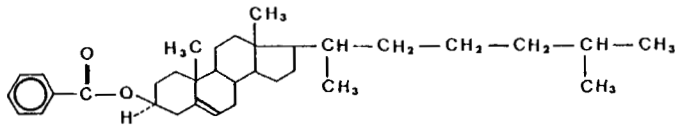


	K	N*	I	Ref Ph	Ref Tr
4473	. 28 .	51.9 .			113
		24			113



	S_A	N^*	I	Ref Ph	Ref Tr
4476	. 16	. 30	.		21
	0.15				21
	36.5	21.36			24★99
	53.31	32.79			69
	53.75	32.24			125
		31			113★
	0.453				
	0.411				21

3β-Benzoyloxy-5α-cholestene



	K	N	I	Ref Ph	Ref Tr
4509	. 150.5	.	182.6 .		33-131-132
	7.82	α2.5	*0.16* α1.75	175	33-131-132
	22.5	χ9.2 170	13.3 χ9.2 192	175*	51
	34.3	χ8.329 171	**1.1** χ8.611 180	125	
		ρ0.9393 170	**0.73** ρ0.9337	175*	126
		ρ0.9545 171	**R0.14** ρ0.9494 180	125	126*
		ρ0.953 166	ρ0.9323 188.5	126	