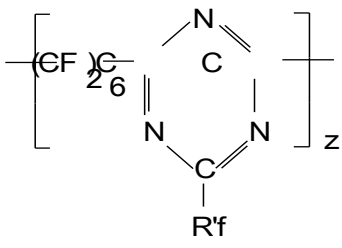
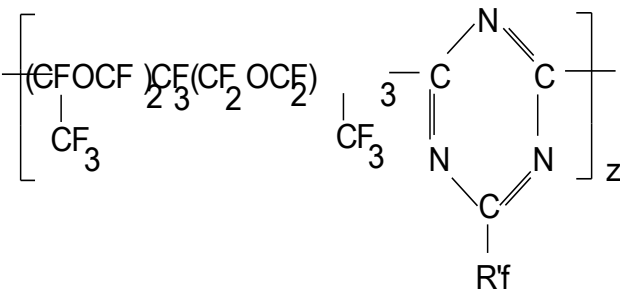


Таблица 10. Расчетные и экспериментальные T_C кислородсодержащих фторполимеров

# п/п	R ^f	T_C (K) расчетная	T_C (K) экспери- ментальная
1.			
1	CF ₃ OCF ₂ CF ₂ OCF ₂ —	222.5	—
2	CF ₃ O(CF ₂ CF ₂ O) ₂ CF ₂ —	214	—
3	CF ₃ O(CF ₂ CF ₂ O) ₃ CF ₂ —	208.5	204
4	CF ₃ O(CF ₂ CF ₂ O) ₄ CF ₂ —	204	—
5	CF ₃ O(CF ₂ CF ₂ O) ₅ CF ₂ —	200.5	—
6	CF ₃ O(CF ₂ CF ₂ O) ₆ CF ₂ —	198	—
7	CF ₃ O(CF ₂ CF ₂ O) ₇ CF ₂ —	195.5	—
8	CF ₃ O(CF ₂ CF ₂ O) ₈ CF ₂ —	194	—
2.			
9	CF ₃ OCF ₂ CF ₂ OCF ₂ —	221	—
10	CF ₃ O(CF ₂ CF ₂ O) ₂ CF ₂ —	217	216
11	CF ₃ O(CF ₂ CF ₂ O) ₃ CF ₂ —	213.5	—
12	CF ₃ O(CF ₂ CF ₂ O) ₄ CF ₂ —	210.5	—
13	CF ₃ O(CF ₂ CF ₂ O) ₅ CF ₂ —	208	—
14	CF ₃ O(CF ₂ CF ₂ O) ₆ CF ₂ —	206	—

# п/п	R'f	T_c (К) расчетная	T_c (К) экспери- ментальная
15	$\text{CF}_3\text{O}(\text{CF}_2\text{CF}_2\text{O})_7\text{CF}_2-$	204	—
16	$\text{CF}_3\text{O}(\text{CF}_2\text{CF}_2\text{O})_8\text{CF}_2-$	202	—
	3. $-(\text{CH}_2\text{CF}_2\text{CH}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}(\text{R}'\text{f})\text{CF}_2)_z-^*$		
17	$\text{CF}_3\text{O}-$	231	233
18	$\text{CF}_3\text{CF}_2\text{O}-$	238.5	246
19	$\text{CF}_3\text{CF}_2\text{CF}_2\text{O}-$	243.5	240
20	$\text{CF}_3\text{OCF}_2\text{CF}_2\text{CF}_2\text{O}-$	223	223
21	$\text{CF}_3\text{OCF}_2\text{CF}_2\text{O}-$	216.5	232
22	$\text{CF}_3\text{O}(\text{CF}_2\text{CF}_2\text{O})_2-$	208	213
23	$\text{CF}_3\text{O}(\text{CF}_2\text{CF}_2\text{O})_3-$	202.5	203
24	$\text{CF}_3\text{O}(\text{CF}_2\text{CF}_2\text{O})_4-$	198.5	194
25	$\text{CF}_3\text{O}(\text{CF}_2\text{CF}_2\text{O})_5-$	195.5	—
26	$\text{CF}_3\text{O}(\text{CF}_2\text{CF}_2\text{O})_6-$	193	—
27	$\text{CF}_3\text{CF}_2\text{OCF}_2\text{CF}_2\text{O}-$	223.5	230
28	$\text{CF}_3\text{OCF}_2\text{OCF}_2\text{CF}_2\text{O}-$	199	208**
29	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_2\text{CF}_2\text{CF}_2\text{O}-$	186	199
30	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_3\text{CF}_2\text{CF}_2\text{O}-$	176	178
31	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_4\text{CF}_2\text{CF}_2\text{O}-$	168	161
32	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_5\text{CF}_2\text{CF}_2\text{O}-$	162	—
33	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_6\text{CF}_2\text{CF}_2\text{O}-$	156.5	—
34	$\text{CF}_3\text{CF}_2\text{CF}_2\text{OCF}(\text{CF}_3)\text{CF}_2\text{O}-$	233	235**
35	$\text{CF}_3\text{OCF}_2\text{CF}_2\text{CF}_2\text{OCF}(\text{CF}_3)\text{CF}_2\text{O}-$	218.5	218**
36	$\text{CF}_3\text{CF}_2\text{CF}_2\text{OCF}_2-$	245.7	—
	4. $-(\text{CH}_2\text{CF}_2\text{CF}(\text{R}'\text{f})\text{CF}_2)_z-^{***}$		
37	$\text{CF}_3\text{OCF}_2\text{OCF}_2\text{CF}_2\text{O}-$	178 (188.5)	—
38	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_2\text{CF}_2\text{CF}_2\text{O}-$	165 (174)	—

# п/п	R'f	T_c (K) расчетная	T_c (K) экспери- ментальная
39	CF ₃ O(CF ₂ O) ₃ CF ₂ CF ₂ O–	156 (163)	–
40	CF ₃ O(CF ₂ O) ₄ CF ₂ CF ₂ O–	149.5 (155)	–
41	CF ₃ O(CF ₂ O) ₅ CF ₂ CF ₂ O–	144 (150)	–
42	CF ₃ O(CF ₂ O) ₆ CF ₂ CF ₂ O–	140 (144.5)	–
43	CF ₃ O(CF ₂ O) ₇ CF ₂ CF ₂ O–	136.5(140.5)	–
	5. –(CH ₂ CF ₂ CH ₂ CF ₂ CH ₂ CF ₂ CF(R'f)CF ₂) _z –		
44	CF ₃ OCF ₂ O–	206	–
45	CF ₃ O(CF ₂ O) ₂ –	189	–
46	CF ₃ O(CF ₂ O) ₃ –	176.5	–
47	CF ₃ O(CF ₂ O) ₄ –	167.5	–
48	CF ₃ O(CF ₂ O) ₅ –	160	–
49	CF ₃ O(CF ₂ O) ₆ –	154.5	–
50	CF ₃ O(CF ₂ O) ₇ –	149.5	–
	6. –(CH ₂ CF ₂ CH ₂ CF ₂ CH ₂ CF ₂ C(R'f,R'f)CF ₂) _z –		
51	CF ₃ O–	211	–
52	CF ₃ O(CF ₂) ₃ O–	208.5	–
53	CF ₃ OCF ₂ O–	180	–
54	CF ₃ O(CF ₂ O) ₂ –	163	–
55	CF ₃ O(CF ₂ O) ₃ –	151.5	–
56	CF ₃ O(CF ₂ O) ₄ –	144	–
57	CF ₃ O(CF ₂ O) ₅ –	138	–
58	CF ₃ O(CF ₂ O) ₆ –	134	–
59	CF ₃ O(CF ₂ O) ₇ –	130.5	–
	7. –(CF ₂ CF ₂ CF(R'f)CF ₂) _z –		
60	CF ₃ O–	249	254

# п/п	R'f	T_c (К) расчетная	T_c (К) экспери- ментальная
61	$\text{CF}_3\text{O}(\text{CF}_2)_3\text{O}-$	231	225**
62	$\text{CF}_3\text{OCF}_2\text{OCF}_2\text{CF}_2\text{O}-$	198.5	—
63	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_2\text{CF}_2\text{CF}_2\text{O}-$	182.5	—
64	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_3\text{CF}_2\text{CF}_2\text{O}-$	170.5	—
65	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_4\text{CF}_2\text{CF}_2\text{O}-$	162	—
66	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_5\text{CF}_2\text{CF}_2\text{O}-$	155	—
67	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_6\text{CF}_2\text{CF}_2\text{O}-$	150	—
68	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_7\text{CF}_2\text{CF}_2\text{O}-$	145.5	—
8.	$-(\text{CF}_2\text{CF}(\text{R}'\text{f}))_z-$		
69	$\text{CF}_3\text{O}-$	235	246**
70	$\text{CF}_3\text{O}(\text{CF}_2)_3\text{O}-$	219	217**
71	$\text{CF}_3\text{OCF}_2\text{OCF}_2\text{CF}_2\text{O}-$	181	—
72	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_2\text{CF}_2\text{CF}_2\text{O}-$	165.5	—
73	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_3\text{CF}_2\text{CF}_2\text{O}-$	155	—
74	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_4\text{CF}_2\text{CF}_2\text{O}-$	147	—
75	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_5\text{CF}_2\text{CF}_2\text{O}-$	141.5	—
76	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_6\text{CF}_2\text{CF}_2\text{O}-$	137	—
77	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_7\text{CF}_2\text{CF}_2\text{O}-$	133.5	—
9.	$-(\text{CF}(\text{R}'\text{f})\text{CF}_2\text{O})_z-$		
78	$\text{CF}_3\text{O}(\text{CF}_2)_3-$	199.5	—
79	$\text{CF}_3\text{OCF}_2\text{O}(\text{CF}_2)_3-$	178.5	—
80	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_2(\text{CF}_2)_3-$	165	—
81	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_3(\text{CF}_2)_3-$	155	—
82	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_4(\text{CF}_2)_3-$	148	—
83	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_5(\text{CF}_2)_3-$	143	—
84	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_6(\text{CF}_2)_3-$	138.5	—

# п/п	R'f	T_c (К) расчетная	T_c (К) экспери- ментальная
85	CF ₃ O(CF ₂ O) ₇ (CF ₂) ₃ – 10. –((CF ₂ CF(R'f)O) ₄ CF ₂ O) _z –	135	–
86	CF ₃ –	193	–
87	CF ₃ OCF ₂ CF ₂ CF ₂ O–	174	169
88	CF ₃ OCF ₂ OCF ₂ CF ₂ O–	148	–
89	CF ₃ O(CF ₂ O) ₂ CF ₂ CF ₂ O–	140	–
90	CF ₃ O(CF ₂ O) ₃ CF ₂ CF ₂ O–	134.5	138**
91	CF ₃ O(CF ₂ O) ₄ CF ₂ CF ₂ O–	131	–
92	CF ₃ O(CF ₂ O) ₅ CF ₂ CF ₂ O–	127	–
93	CF ₃ O(CF ₂ O) ₆ CF ₂ CF ₂ O–	125	–
94	CF ₃ O(CF ₂ O) ₇ CF ₂ CF ₂ O– 11. –(Si(CH ₃ ,R'f)O) _z –	123	–
95	CF ₃ (CF ₂) ₂ O(CF ₂) ₂ (CH ₂) ₂ –	186	182
96	CF ₃ (CF ₂) ₂ OCF(CF ₃)(CH ₂) ₂ –	186	184
97	CF ₃ CH ₂ CH ₂ –	195.5	200
98	CF ₃ OCF ₂ O(CF ₂) ₂ (CH ₂) ₂ –	150	–
99	CF ₃ O(CF ₂ O) ₂ (CF ₂) ₂ (CH ₂) ₂ –	142	–
100	CF ₃ O(CF ₂ O) ₃ (CF ₂) ₂ (CH ₂) ₂ –	136.5	138**
101	CF ₃ O(CF ₂ O) ₄ (CF ₂) ₂ (CH ₂) ₂ –	132	–
102	CF ₃ O(CF ₂ O) ₅ (CF ₂) ₂ (CH ₂) ₂ –	129	–
103	CF ₃ O(CF ₂ O) ₆ (CF ₂) ₂ (CH ₂) ₂ –	126	–
104	CF ₃ O(CF ₂ O) ₇ (CF ₂) ₂ (CH ₂) ₂ – 12. –(Si(R'f,R'f)O) _z –	124	–
105	CF ₃ OCF ₂ O(CF ₂) ₂ (CH ₂) ₂ –	159	–

# п/п	R'f	T_C (К) расчетная	T_C (К) экспери- ментальная
106	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_2(\text{CF}_2)_2(\text{CH}_2)_2-$	147.5	—
107	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_3(\text{CF}_2)_2(\text{CH}_2)_2-$	140.5	—
108	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_4(\text{CF}_2)_2(\text{CH}_2)_2-$	135	—
109	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_5(\text{CF}_2)_2(\text{CH}_2)_2-$	131	—
110	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_6(\text{CF}_2)_2(\text{CH}_2)_2-$	127.5	—
111	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_7(\text{CF}_2)_2(\text{CH}_2)_2-$	125	—
	13.		
	$-(\text{P}(\text{R}'\text{f}, \text{R}'\text{f})=\text{N})_z-$		
112	$\text{CF}_3\text{CH}_2\text{O}-$	217.2	207.2
113	$\text{CF}_3\text{OCF}_2\text{CF}_2\text{CH}_2\text{O}-$	175.7	174.2
114	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_2\text{CF}_2\text{CH}_2\text{O}-$	131.2	132.2
115	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_3\text{CF}_2\text{CH}_2\text{O}-$	134.2	135.2
116	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_4\text{CF}_2\text{CH}_2\text{O}-$	119.2	119.2
117	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_5\text{CF}_2\text{CH}_2\text{O}-$	122.7	123.2
118	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_6\text{CF}_2\text{CH}_2\text{O}-$	112.7	—
119	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_7\text{CF}_2\text{CH}_2\text{O}-$	116.2	—
120	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_8\text{CF}_2\text{CH}_2\text{O}-$	111.2	—
121	$\text{CF}_3\text{O}(\text{CF}_2\text{O})_9\text{CF}_2\text{CH}_2\text{O}-$	112.2	—

* некоторые отличия T_C экспериментальных от T_C расчетных можно объяснить несоответствием истинного состава сополимеров заданному составу

** данные ФГУП “НИИСК”

*** в скобках указаны T_C , рассчитанные с учетом влияния водородной связи

**** T_C , рассчитанная с учетом различного влияния водородной связи.