

$C_6Cl_3F_3$  $hP24$  $(176) P6_3/m - h^4$  **$C_6Cl_3F_3$  sym [1]**

Structural features: Planar  $C_6Cl_3F_3$  molecules (a  $C_6$  hexagon with alternatively one Cl or F bonded to each C) in a Mg-type (h.c.p.) arrangement.

Chaplot S.L. et al. (1981) [1]

 $C_6Cl_3F_3$  $a = 0.8541, c = 0.6282 \text{ nm}, c/a = 0.736, V = 0.3969 \text{ nm}^3, Z = 2$ 

site	Wyck.	sym.	$x$	$y$	$z$	occ.	atomic environment
C1	$6h$	$m..$	0.1446	0.525	$\frac{1}{4}$		coplanar triangle $FC_2$
Cl2	$6h$	$m..$	0.2278	0.2621	$\frac{1}{4}$		single atom C
C3	$6h$	$m..$	0.2855	0.4843	$\frac{1}{4}$		coplanar triangle $C_2Cl$
F4	$6h$	$m..$	0.4373	0.0195	$\frac{1}{4}$		single atom C

Transformation from published data:  $y, x, -z$ ; origin shift  $0 \ 0 \ \frac{1}{2}$

Experimental: single crystal, diffractometer, X-rays,  $R = 0.039$

Remarks: 1,3,5-trichloro-2,4,6-trifluorobenzene, referred to as symmetric trichloro-trifluorobenzene. We derived conventional atom coordinates from the orthogonal coordinates reported in [1].

References: [1] Chaplot S.L., McIntyre G.J., Mierzejewski A., Pawley G.S. (1981), Acta Crystallogr. B 37, 1896-1900.