

TABLE III
PROPERTIES^a OF THE TRANSITION IN SOLID He³, $\beta \rightarrow \alpha$

P (kg/cm ²)	T (°K)	dP/dT (kg/cm ² /deg)	ΔV (cm ³ /mol)	ΔS (cal/deg/mol)
140.44 ^b	3.148 ^b	34.0	0.116	0.092
130	2.805	27.0	0.118	0.074
120	2.370	19.2	0.100	0.045
112	1.846	11.6	0.072	0.019

^a Smoothed values.

^b Triple point for solid α , β , and fluid.

TABLE IV
GAS DENSITIES OF He³ AND He⁴ AT 21.40°C

P kg/cm ²	ρ He ⁴ Amagats	ρ He ³ Amagats
53.44	46.30	46.28
112.45	94.95	94.81
204.55	166.20	165.99

TABLE V
CONSTANTS^a IN EQ. (1) FOR THE VOLUME CHANGE OF MELTING

Solid	A	B	C	P_m range, kg/cm ²	rms dev., cm ³ /mol
He ⁴	1.60677	0.33439	-103.25	175-3555	0.0051
He ³ α	1.56464	0.39023	-29.998	51-128	0.0064
He ³ β	1.51053	0.30825	-42.581	146-3555	0.0031

^a Pressure units in kg/cm² and volume units in cm³/mol.

TABLE VI
CONSTANTS^a IN EQ. (2) FOR THE VARIOUS TRANSITIONS

Transition	A'	B'	C'	D'	E'	T range, deg K	rms dev., kg/cm ²
Solid He ⁴ \rightarrow fluid He ⁴ I	33.280	-44.156	31.799	-4.8159	0.30313	1.8-5.2	0.23
Solid He ³ α \rightarrow fluid	27.256	-0.64696	16.0205	-1.39505	0	1.2-3.1	0.16
Solid He ³ β \rightarrow fluid	3.873	30.5539	4.08176	0	0	3.2-4.4	0.10
Solid He ³ α \rightarrow Solid He ³ β	104.906	0	-0.053454	1.15635	0	1.8-3.1	0.42

^a Pressure units in kg/cm² and temperature units in deg K.