Estimate the specific volume of the saturated isobutane at 300 K

Tc	408.1	K		
Pc	36.5	bar	T	300 K
Omega	0.283			
R	83.14	cm3.bar/(mol.K)		

Solution:

Tr	0.735			
Pr	0.084			
Z	0.012		Zc	0.265
			Zc Experimental	0.283
Ps	3.078		Error	-6.3%
Ps experimental	3.704			

V=ZRT/P	97.88	cm3/mol
VL experimental	105.90	cm3/mol
Error	-7.6%	

Vc	246.545	cm3/mol
Vc Experimental	263.000	cm3/mol
Error	-6.3%	

Vv	6091.78	cm3/mol
Vv experimental	6031.00	cm3/mol
Error	1.0%	

Temperature range for Lee-Kesler method			Pressure range for Lee-Kesler method		
Tmin	122.43	K	Pmin	0.365	bar
Tmax	1632.4	K	Pmax	365	bar