

	<i>Molecular Mass</i> (Da)	<i>Solvent-Excluded</i> <i>Volume</i> (Å ³)	<i>Partial Specific Volume, \bar{V}</i> (mL/g)		
			<i>Calculated</i>	<i>Experimental</i>	<i>Voronoi^d</i>
<i>Ribosome</i>	1,340,664	1,395,480	0.627	0.592 ^a	0.617
<i>RNA</i>	931,319	867,245	0.561	0.540 ^b	0.569
<i>Protein</i>	409,345	498,025	0.733	0.726 ^c	0.728

Table 3.3: Partial specific volumes of the ribosomal components. Experimental values from ^avan Holde & Hill (1974) for the *E. coli* 50S ribosome, ^bDurchschlag (1986) for polynucleotides, and ^cCohn & Edsall (1943) based on amino acid composition. ^dVoronoi partial specific volume is calculated based on average RNA atomic volumes reported in Chapter 2, page 36 and protein atomic volumes from Tsai *et al.* (2001).