

Table 6 The Minimum Sampling and Sample Volume Requirement for Each Plate and Tube Type

Parameter	Plate Type	Standard Mode/HT Mode	Custom Mode With Absolute Count Checked	Custom Mode With Absolute Count Unchecked			
Dead Volume (µL)	12 x 75 mm tube with 40 tube rack	0.5	0.5	0.5			
	24-well plates	265.0	265.0	265.0			
	48-well plates	90.0	90.0	90.0			
	96-well plates (flat-bottom)	26.5	26.5	26.5			
	96-well plates (V-bottom)	0.6	0.6	0.6			
	96-well plates (U-bottom)	0.0	0.0	0.0			
	384-well plates	3.0	3.0	3.0			
	12 X 75 mm Tube with 24 tube cooling rack	0.5	0.5	0.5			
	96-well plate (U-Bottom) with cooling box	0.0	0.0	0.0			
	96-well plate (V-Bottom) with cooling box	0.6	0.6	0.6			
	96-well plate (Flat Bottom) with cooling box	26.5	26.5	26.5			
	Sampling Overhead Volume (µL)	All Plates and Racks	10	30		10	 
	Minimum Sampling Volume (µL)	12 x 75 mm tube with 40 tube rack	10	5		5	
		24-well plates	10	5		5	
48-well plates		10	5	5			
96-well plates (U-, V- and flat-bottom)		5	5	5			
384-well plates		5	5	5			
12 X 75 mm Tube with 24 tube cooling rack		10	5	5			
96-well plate (U-, V- and Flat Bottom) with cooling box		5	5	5			
Minimum Sample Volume (µL)		12 x 75 mm tube with 40 tube rack	20.5	35.5	15.5		
	24-well plates	285	300	280			
	48-well plates	110	125	105			
	96-well plates (flat-bottom)	41.5	61.5	41.5			
	96-well plates (V-bottom)	15.6	35.6	15.6			
	96-well plates (U-bottom)	15	35	15			
	384-well plates	18	38	18			
	12 X 75 mm Tube with 24 tube cooling rack	20.5	35.5	15.5			
	96-well plate (U-Bottom) with cooling box	15	35	15			
	96-well plate (V-Bottom) with cooling box	15.6	35.6	15.6			
	96-well plate (Flat Bottom) with cooling box	41.5	61.5	41.5			

- **Dead Volume** is the volume of the sample remaining inside the sample tube or plate well that cannot be aspirated into sample injection probe after each sample acquisition.
- **Sampling Overhead Volume** is the volume of extra sample aspirated into the SIP during each sample acquisition.
- **Sampling Volume** is the volume of the sample user defined in the **Stop Condition**.
- **Sample Volume** is the volume of the sample user prepared and placed inside the sample tube or plate well before each sample run.

Final min. volume per well =Dead Volume + Sampling Overhead Volume+ min. Sampling volume

For 12x75 mm Tube: min. sample volume per well (µl) = 0.5+30 (or 10) +5 = 35.5 (or 15.5) with (or without Abs. Count)

For 96 U-bottom plate: min. volume per well (µl) = 0+30 (or 10) +5 = 35 (or 15) with (or without Abs. Count).