

Appendix (How to calculate AC and CV)

AC

$$AC[\%] = \frac{\bar{x} - \alpha}{\alpha} \times 100$$

α : Volume setting
 \bar{x} : Actual average volume

CV

$$CV[\%] = \frac{SD}{\bar{x}} \times 100$$

SD : Standard deviation
 \bar{x} : Actual average volume

SD

$$SD = \sqrt{\frac{\sum_{i=1}^n (\bar{x} - x_i)^2}{n-1}}$$

SD : Standard deviation
 \bar{x} : Actual average volume
 x_i : Actual volume
 n : The number of samples

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Temperature (°C)	Air pressure (kPa)			
	95	100	101.3	105
20.0	1.0028	1.0028	1.0029	1.0029
20.5	1.0029	1.0029	1.0030	1.0030
21.0	1.0030	1.0031	1.0031	1.0031
21.5	1.0031	1.0032	1.0032	1.0032
22.0	1.0032	1.0033	1.0033	1.0033
22.5	1.0033	1.0034	1.0034	1.0034
23.0	1.0034	1.0035	1.0035	1.0036
23.5	1.0036	1.0036	1.0036	1.0037
24.0	1.0037	1.0037	1.0038	1.0038
24.5	1.0038	1.0039	1.0039	1.0039
25.0	1.0039	1.0040	1.0040	1.0040

*Mass can be converted to volume with correct coefficient for distilled water.

Measurement volume(ul)=Measurement weight(mg) x Correct Coefficient for distilled water