



## Mixture Grade Specifications

Calibration Standards Specifications					
Mixture Grade	Concentration Range			Blend Tolerance	Certification Accuracy
<b>Environmental Grades:</b>					
EPA Protocol	*26ppm	To	50%	± 5% of component	Expressed as the Expanded Uncertainty (U)
	*2ppm	To	*25ppm	± 10% of component	Expressed as the Expanded Uncertainty (U)
Primary Master (NIST Traceable)	1%	To	50%	± 1% of component	± 1% of component or ± 0.02% absolute, whichever is smaller
	26ppm	To	9,999ppm	± 5% of component	± 1% of component
	*2ppm	To	*25ppm	± 10% of component	± 1% of component
Certified Master (NIST Traceable)	1%	To	50%	± 5% of component	± 2% of component
	26ppm	To	9,999ppm	± 10% of component	± 2% of component
	*2ppm	To	*25ppm	± 20% of component	± 5% of component
<b>Standard Grades:</b>					
Primary Standard	1%	To	50%	± 1% of component	± 1% of component or ± 0.02% absolute, whichever is smaller
	26ppm	To	9,999ppm	± 5% of component	± 1% of component
	*2ppm	To	*25ppm	± 10% of component	± 1% of component
Certified Standard	1%	To	50%	± 5% of component	± 2% of component
	*50ppm	To	9,999ppm	± 10% of component	± 2% of component
	*1ppm	To	*49ppm	± 20% of component	± 5% of component
Uncertified	0.1%	To	49.9%	± 10% of component	Not Analyzed
	*1ppm	To	*999ppm	± 20% of component	Not Analyzed
Preparation tolerances is the maximum deviation from the desired concentration of the minor component. Certification Accuracy is the maximum deviation from the reported values of the minor component. * Blend Tolerance subject to change depending on minor component.					

## WestAir Grade Definitions

**EPA Protocol:** Used for the calibration and audits of Continuous Emission Monitors (CEMs). EPA Protocols are NIST traceable and produce in accordance with the most updated EPA specifications found in document 600/R-12/531 Rev 5/12.

**Primary Master:** High accuracy blends prepared gravimetrically on high-precision electronic balances. These standards are analyzed and named against NIST traceable reference materials.

**Certified Master:** Calibration mixtures prepared by gravimetric, volumetric or partial pressure analyzed against NIST traceable reference materials.

**Primary Standard:** High accuracy blends prepared gravimetrically on high-precision electronic balances. These standards are analyzed against a Westair Primary Laboratory Standard and named to a gravimetrically generated concentration. NOTE: Reactive mixtures that meet the criteria of a Primary Standard will be named on the analytical value obtained.

**Certified Standard:** Calibration mixtures prepared by gravimetric, volumetric or partial pressure. These standards are analyzed against a Westair Primary Laboratory Standard.