



## ORGANIC

SPEX CertiPrep is the industry leader for over 60 years in the CRM marketplace meeting the needs of laboratories worldwide with innovation and research.



Accredited by A2LA for ISO 17025 and Guide 34, and Certified by UL-DQS for ISO 9001.

**WINE CERTIFIED REFERENCE MATERIALS**  
**WINE TAINT DETECTION STANDARDS**

Wine is a complex combination of water, alcohol, and other substances such as organic acids, phenols, sugars, carbon dioxide, and sulfur dioxide. The chemical interactions of these compounds combined with the aging process, determines the quality of the color, taste, and aroma of the wine. However, during this process the chemical interactions can also play key roles in spoiling the wine. For instance, cork taint transpires when naturally occurring airborne fungi react with chlorophenol compounds to form **2,4,6-trichloroanisole (TCA)** in the wine. When this reaction occurs, the wine's aroma is reduced significantly, replaced by an undesirable smell and taste. The wine industry has identified and measured several compounds that can cause this spoilage. For this industry, SPEX CertiPrep offers Wine Certified Reference Materials (CRMs) that are designed for GC, GC/MS, HPLC, and HPLC/MS analyses. These standards are manufactured from the highest purity starting materials and the highest grade of solvents available to guarantee superior standards. Every standard is supplied with a comprehensive Certificate of Analysis. The back of this flyer lists some of the Wine standards offered by SPEX CertiPrep. For a custom standard quote, please contact your local sales representative for further information.

### UL and A2LA Stamp of Approval

- Quality system complies with ISO 9001:2008 — Registered with UL.
- Standards manufactured to meet the requirements of ISO 17025:2005 and ISO Guide 34-2000 — Accredited by A2LA.

### SPEXOrganics

- GC, Gas Chromatography (FID, ECD, PID, TCD).
- GC/MS, Gas Chromatography/Mass Spectrometry (EI, CI).
- HPLC, High-Performance Liquid Chromatography.
- HPLC/MS, High-Performance Liquid Chromatography/Mass Spectrometry.

### Features of SPEX

- Over 2,000 different single-component standards available in concentrations of 100 and 1,000 µg/mL. Custom standards at higher or lower concentrations are also available.
- Standards packaged in 1.0mL ampules, up to 1L bottles.
- Wide selection of stock multi-component standards available. Visit our website for further details.
- Concentration of components guaranteed.
- Stability of each standard guaranteed.
- Isotopically labeled standards available for Internal Standard, Surrogate and Isotope Dilution analysis.
- Custom packaging readily available.
- Custom blends manufactured upon request based on your individual needs.



### Value of SPEXOrganics

- SPEX CertiPrep provides the highest-quality standards available.
- Impurities in standard are assessed by GC/MS to ppm levels and outlined in our Certificate of Analysis.
- Uncertainty of standard is reported on the Certificate of Analysis.
- Weights used are traceable to NIST.
- Manufactured by experienced chemists to ensure the highest quality.



# WINE Standards

## Wine Standards

Part #	Compound	Concentration	Matrix	Volume (mL)
S-133	Acetic Acid	1000 µg/mL	Methanol P&T	1.0
S-133-W10K	Acetic Acid	10,000 µg/mL	Water	1.0
S-1885	Ethanol	1000 µg/mL	Methanol P&T	1.0
S-1885-W2K	Ethanol	2000 µg/mL	Water	1.0
S-1983	2-Ethylphenol	1000 µg/mL	Methanol P&T	1.0
S-1985	4-Ethylphenol	1000 µg/mL	Methanol P&T	1.0
S-2050	2-Fluorophenol	1000 µg/mL	Methanol P&T	1.0
S-2930	2,3,4,5,6-Pentachloroanisole	1000 µg/mL	Methanol	1.0
S-2950	Pentachlorophenol	1000 µg/mL	Methanol	1.0
S-3035	Phenol-d6	1000 µg/mL	Methanol P&T	1.0
S-3405	2,3,4,6-Tetrachlorophenol	1000 µg/mL	Methanol	1.0
S-3555	2,4,6-Tribromophenol	1000 µg/mL	Methanol P&T	1.0
S-3586	2,4,6-Trichloroanisole	1000 µg/mL	Methanol	1.0
S-3645	2,4,6-Trichlorophenol	1000 µg/mL	Methanol P&T	1.0
S-4168	Malic Acid	1000 µg/mL	Methanol P&T	1.0
S-4183	4-Ethyl-2-Methoxyphenol	1000 µg/mL	Methanol P&T	1.0
S-4309	2,4,6-Tribromoanisole	1000 µg/mL	Methanol	1.0
S-4336-20	2,4,6-Trichloroanisole-d <sub>5</sub>	20 ng/mL	Methanol P&T	5.0
S-4336-46	2,4,6-Trichloroanisole-d <sub>5</sub>	46 µg/mL	Ethanol	10.0
S-4336-100	2,4,6-Trichloroanisole-d <sub>5</sub>	100 µg/mL	Methanol P&T	1.0
S-4335	2,4,6-Tribromophenol-d <sub>5</sub>	1000 µg/mL	Methanol P&T	1.0
S-4335-100	2,4,6-Tribromophenol-d <sub>5</sub>	100 µg/mL	Methanol P&T	1.0
S-5005	Dextrose	1000 µg/mL	Methanol P&T	1.0
S-609	2,3-Butanedione	1000 µg/mL	Methanol P&T	1.0
S-905	2-Chlorophenol-3,4,5,6-d <sub>4</sub>	1000 µg/mL	Methanol P&T	1.0
WINE-1	2,4,6-Tribromoanisole-d <sub>5</sub>	100 µg/mL	Methanol	1.0
	2,4,6-Trichloroanisole-d <sub>5</sub>	100 µg/mL		
	Pentachloroanisole-d <sub>3</sub>	100 µg/mL		
WINE-2	2,3,4,5,6-Pentachloroanisole	100 µg/mL	Methanol P&T	1.0
	2,3,4,6-Tetrachloroanisole	100 µg/mL		
	2,4,6-Trichloroanisole	100 µg/mL		
WINE-3	Carbon Disulfide	10,000 µg/mL	Methanol P&T	1.0
	Ethyl Sulfide	10,000 µg/mL		
	Ethanethiol	10,000 µg/mL		
	Ethyl Disulfide	10,000 µg/mL		
	Ethyl Methyl Sulfide	10,000 µg/mL		
	2-Ethylthiophene	10,000 µg/mL		
	Methanethiol	10,000 µg/mL		
	Methyl Disulfide	10,000 µg/mL		
	Methyl Sulfide	10,000 µg/mL		
	2-Methyl-2-Propanethiol	10,000 µg/mL		
	2-Methylthiophene	10,000 µg/mL		
	1-Pentanethiol	10,000 µg/mL		
	2-Propanethiol	10,000 µg/mL		
	Thiophene	10,000 µg/mL		

Can't find the standards you are looking for?

SPEX CertiPrep can make custom wine standards to meet your exact needs.

Call your local sales representative for more information.



**SPEX CertiPrep** 

Your Science is Our Passion.®

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