CERTIFIED REFERENCE MATERIALS

# 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.

### **ORGANIC**

SPEX CertiPrep is the industry leader for over 55 years in the CRM marketplace meeting the needs of laboratories worldwide with innovation and research.



#### ■ 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 can be used for

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

#### ■ Features of SPEXOrganics

- Over 2,000 different single-component standards available in concentrations of 100 and 1,000µg/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.



Inorganic & Organic Certified Reference Materials

Part #	Compound	Concentration	Matrix	Volume
S-133	Acetic Acid	1000 μg/mL	Methanol P&T	(mL) 1.0
5-133-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>s</sub>	20 ng/mL	Methanol P&T	5.0
S-4336-46	2,4,6-Trichloroanisole-d	46 μg/mL	Fthanol	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>s</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	1000 μg/mL	Methanol P&T	1.0
WINE-1	2,4,6-Tribromoanisole-d <sub>5</sub> 2,4,6-Trichloroanisole-d <sub>5</sub> Pentachloroanisole-d <sub>3</sub>	100 μg/mL 100 μg/mL 100 μg/mL	Methanol	1.0
WINE-2	2,3,4,5,6-Pentachloroanisole 2,3,4,6-Tetrachloroanisole 2,4,6-Trichloroanisole	100 μg/mL 100 μg/mL 100 μg/mL	Methanol P&T	1.0
WINE-3	Carbon Disulfide Ethyl Sulfide Ethanethiol Ethyl Disulfide Ethyl Methyl Sulfide 2-Ethylthiophene Methanethiol Methyl Disulfide Methyl Sulfide 2-Methyl-2-Propanethiol 2-Methylthiophene 1-Pentanethiol 2-Propanethiol Thiophene	10,000 μg/mL 10,000 μg/mL	Methanol P&T	1.0

## Can't find the standard you're looking for?

SPEX CertiPrep can custom make a standard to meet your exact needs.

Call your local sales representative for more information.





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