

GUIDELINES FOR GRAPE AND WINE ANALYSIS

These are recommendations for a complete wine testing program, whether done by an independent laboratory, the winery's own laboratory or combined efforts. They are meant to be used as guidelines for planning only.

WHAT TO DO & WHEN

STAGES IN THE PROCESS	PANEL TO USE	RECOMMENDED ANALYSES	OPTIONAL ANALYSES
GRAPES		°Brix; pH; Titratable acidity; Physical examination for soundness, temperature, varietal aroma and flavor	Phenolics; Color; Skin maturity; Seed maturity; Tartaric acid; Malic acid; Potassium; Berry variability, <i>Botrytis</i> Risk Assessment
JUICE/MUST	JUICE PANEL 3 CORE JUICE PANEL 3.5	Temperature; °Brix; pH; Titratable acidity; SO ₂ ; Ammonia; Assimilable nitrogen; Microscopic scan	Acid profile: malic, tartaric, citric; Potassium, Phenolics/color; Volatile acidity; Percent solids, <i>Botrytis</i> Risk Assessment
FERMENTING JUICE/MUST		°Brix (daily); Temperature (daily)	
OTHER FERMENTATION MONITORING	FERMENTATION ASSESSMENT PANEL 9	Alcohol; Fermentable sugars; Volatile acidity; pH; Sulfide/mercaptan detection; Microscopic scan: yeast & bacteria counts	SO ₂ ; Malic acid
WINE ON COMPLETION OF PRIMARY FERMENTATION	BASIC CHEMISTRY PANEL 1 POST FERMENTATION PANEL 8	Alcohol; pH; Titratable acidity; SO ₂ ; Volatile acidity; Fermentable sugars; Malic acid (to monitor malolactic fermentation)	Acid profile; Potassium; Phenolics/color; Fining trials; Adams Assay; Pectin; Microbiology profile; Urea
PROBLEM SOLVING	BRETT MANAGEMENT PANEL 7 FERMENTATION ASSESSMENT PANEL 9 MALOLACTIC FERMENTATION ASSESSMENT PANEL 10 WINE IMPROVEMENT PANEL 6	Sulfide/mercaptan detection & treatment series; Alcohol; pH; SO ₂ ; Volatile acidity; Culture for spoilage organisms; Microscopic scan; 4-ethylphenol, 4-ethylguaiacol; Acid profile: acetic, malic, tartaric, succinic, lactic, citric; Acid adjustments (flavor or pH adjustments); Fining trials; Copper/iron/potassium/sodium/calcium; Sensory Evaluation; Potential browning/pinking; Acetaldehyde; Haloanisoles	
AGEING AND FINISHING <small>PRIOR TO BARRELING AND AT INTERVALS DURING AGEING</small>	BASIC CHEMISTRY PANEL 1 QC PANEL 2 WINE IMPROVEMENT PANEL 6 BRETT MANAGEMENT PANEL 7	pH; Titratable acidity; Volatile acidity; SO ₂ ; Residual sugars in sweet wines; Cultures for spoilage organisms; 4-ethylphenol & 4-ethylguaiacol; Sensory Evaluation	Phenolics/color; Turbidity
PRIOR TO BOTTLING	BASIC CHEMISTRY PANEL 1 UNFILTERED BOTTLING PANEL 4 WINE IMPROVEMENT PANEL 6	Fining trials (protein stability, clarification, sensory modification, acid/pH adjustment series); SO ₂ ; Heat stability; Cold stability; Alcohol; pH; Titratable acidity; Volatile acidity; Fermentable sugars; Malic acid; Cultures for spoilage organisms; Packaging QC; Cork evaluation	4-ethylphenol and 4-ethylguaiacol; Turbidity; Phenolics/color; Color stability; Filterability; Haloanisoles; Cork Sensory Evaluation
BOTTLING		Sensory Evaluation; Fill levels; Headspace vacuum/pressure; Sanitation checks	Dissolved O ₂ ; CO ₂
AFTER BOTTLING		SO ₂ ; Bottled wine sterility or cultures for spoilage organisms; Periodic sensory evaluation & stability checks	4-ethylphenol and 4-ethylguaiacol
EXPORT OR LEGAL COMPLIANCE ANALYSIS	EXPORT PANEL 5	Analysis for export: EU/Japan/Other; Analysis for state requirements; Ochratoxin	



PANEL 1

BASIC CHEMISTRY PANEL FOR WINEMAKING

Covers baseline chemistry tests for assessing wine from fermentation through bottling.

Includes: Alcohol, Titratable Acidity, pH, Volatile Acidity, Free SO₂, Total SO₂, Malic Acid, Glucose/Fructose

\$98.00

PANEL 2

QC PANEL

Standard analyses for routine monitoring.

Includes: Titratable Acidity, pH, Free SO₂, Total SO₂, Volatile Acidity

\$55.00

PANEL 3

JUICE PANEL

Analyses for juice evaluation: maturity, acid composition and balance, nitrogen level for yeast nutrition.

Includes: Brix (Refractometer), Ammonia, Assimilable Amino Nitrogen, Titratable Acidity, pH, Potassium, Organic Acid Profile (Tartaric, Malic, Lactic, Acetic), Botrytis Risk Assessment

\$110.00

Call Vinquiry for juice handling and shipping instructions.

PANEL 3.5

CORE JUICE PANEL

Analyses for basic information on fruit maturity and nutritional status.

Includes: Brix (Refractometer), Ammonia, Assimilable Amino Nitrogen, Titratable Acidity, pH, Malic Acid

\$75.00

Call Vinquiry for juice handling and shipping instructions.

PANEL 4

UNFILTERED BOTTLING PANEL

Includes analyses winemakers can use to make decisions on microbiological stability and clarity.

RED WINE INCLUDES: Glucose/Fructose, Malic Acid, Turbidity, Volatile Acidity, Culture for Brettanomyces, Culture for Bacteria, 4-ethylphenol, 4-ethylguaiacol

\$165.00

WHITE WINE INCLUDES: Glucose/Fructose, Malic Acid, Turbidity, Volatile Acidity, Culture for Yeast, Culture for Bacteria

\$115.00

Panel includes written evaluation by a Vinquiry enologist.

PANEL 5

EXPORT PANEL

Analysis covers VI-1 Long form for EU, Japan, Korea, Taiwan. (Analysis requires a finished bottle.)

Includes: Actual Alcohol, Total Alcohol, Titratable Acidity, Extract, Total SO₂ (A/O), Sorbic Acid, Volatile Acidity, Citric Acid, Glucose/Fructose

\$198.00

Includes one VI-1 Long form and one Japan form. Reissues \$25.00 each

EACH OF OUR ANALYTICAL PANELS is developed with specific winemaking stages in mind. The panels combine analyses that are needed at various points and critical decision-making moments in winemaking. They provide information for understanding parameters of juice, fermentation, wine ageing, problem solving, filtration, bottling and export.

In addition to the ease of choosing these tests, the panels are priced at a discount compared to the same group of test requested separately—A NICE WAY TO SAVE MONEY!

PANEL 6

WINE IMPROVEMENT PANEL

Used to help winemakers diagnose and treat common wine defects.

Includes: Wine Improvement Assessment, Wine Enhancement Series, Consultation with Winemaker

\$195.00

PANEL 7

BRETT MANAGEMENT PANEL

Tests to monitor the growth of Brettanomyces yeast and assess its impact in wine.

Includes: Plating for Brettanomyces, Free SO₂, 4-ethylphenol, 4-ethylguaiacol, Brett Sensory Impact rating

\$115.00

PANEL 8

POST FERMENTATION PANEL

Analyses for completion of primary and malolactic fermentation.

Includes: Volatile Acidity, Malic Acid, Glucose/Fructose

\$40.00

PANEL 9

FERMENTATION ASSESSMENT PANEL

Analyses to assess the degree of completion of fermentation, possible start of spoilage and yeast viability.

Includes: GC Alcohol, Microscopic Scan, Volatile Acidity, Malic Acid, Glucose/Fructose

\$75.00

Panel includes a brief consultation.

PANEL 10

MALOLACTIC FERMENTATION ASSESSMENT PANEL

Addresses the issue of stuck fermentation using chemistry and microbiology.

Includes: GC Alcohol, Volatile Acidity, Total SO₂, Free SO₂, Malic Acid, Glucose/Fructose, Microscopic Scan, pH

\$100.00

