

# **2008 - 2009 Catalog**

Analytical & Consulting Services

Fermentation & Winemaking Products

July 2008 to July 2009

## ***ABOUT ENOLAB***

The Enolab is an independent and confidential laboratory for enological testing and consulting. The laboratory is for both the professional and amateur winemaker.

The laboratory's goal is to provide time sensitive analysis for the winemaker and to help elevate the quality of wines being produced in the Northwest

Enolab is also a resource for fermentation and winemaking products including yeasts, nutrients and additives, enzymes and bacteria.

The laboratory is located in the Woodinville Valley, 30 minutes from downtown Seattle, and services the Greater Pacific Northwest.

Enolab is open Monday thru Friday, 8:00am to 4:30pm during the year, with extended hours during crush (September thru mid November)

## ***Laboratory Staff***

Enolab is staffed with trained enologists and winemakers with a combined winemaking experience of over 30 years, with most of it in Washington State.

Emily Schnoor, *Enologist*, is the Laboratory Manager with a degree in Viticulture & Enology from the University of California at Davis, and has winemaking experience from Trefethen Vineyards and Clarksburg Wine Company in Northern CA, and Lawson's Dry Hills Winery in Marlborough, New Zealand.

Hillary Sjolund, *Consulting Winemaker*, started her career in wine as a harvest worker for Pine Ridge Winery in Napa Valley. While attending the University of California at Davis, she traveled to Chile for a southern hemisphere harvest at Vina Maquis in the Colchagua Valley. After graduating with a degree in Fermentation Science, she returned to Pine Ridge as the assistant winemaker under Stacy Clark, responsible for all cellar operations. Hillary is currently the head winemaker for DiStefano Winery in Woodinville, WA.

Mark Newton, *General Manager & Consulting Winemaker*, has a degree in engineering from the University of California at Santa Barbara and 25 years of experience in winemaking in the State of Washington.

Alla Kostenko, *Office Manager*, relocated to Seattle from Walla Walla, where she worked for Waterbrook Winery and Whitehouse-Crawford Restaurant. Kostenko arrived in the United States from Russia six years ago to join family members who had moved several years earlier. In Walla Walla, Alla graduated from Walla Walla High School, before attending Whitman College for music and dancing classes.

## ***New Customers, Laboratory Samples & Analyses***

All new customers are requested to fill out the “New Customer Application” providing winemaking status (professional or amateur), contact information, and invoicing options prior to any analyses being performed (see the back of the catalogue). The Customer Application can be mailed, faxed, or emailed to the Laboratory.

Fermentation and winemaking products may be ordered using the “Customer Order Form” and can be dropped off, emailed or faxed to the laboratory.

Samples for analysis or consulting may be dropped off during normal business hours or can be placed in our “After Hours Box” at anytime when the laboratory is not open. The After Hours Box is checked daily at the start of business and routinely during the day. The After Hours Box has a combination lock on it, with the combination changed on a regular basis. If you plan on using or needing the use of the After Hours Box please call ahead to get the latest combination.

If you are in need of fermentation supplies, and need it after hours, we can place the supplies in the After Hours Box, with adequate advanced notice.

Wine sample labels can be picked up at the winery or can be downloaded from our website at [www.theENOLAB.com](http://www.theENOLAB.com) .

## ***Directions to the Lab***

From Seattle take I-90 East to I-405 North. Continue on I-405 for 10 miles. Take the Hwy 202 (522) Exit (Wenatchee/Woodinville/Monroe Exit) and go East 0.7 miles. Take the first exit at 202 East, Woodinville/Redmond Exit. Turn right at the stop light at the end of the exit ramp. Go 0.2 miles under the railroad trellis bridge and turn right to continue on to SR 202 (the second light). Go 0.5 miles to Woodinville Dr. and take a right (4-way stoplight). After 0.3 miles turn right into the industrial park, Woodinville Corporate Center 1. Follow the road to the right towards the large tan building. We are located in the same facility as DiStefano Winery, next door to Scrivanich Marble & Stone.

# **ANALYTICAL PANELS**

## **Grape Maturity Analysis (375 ml sample)**

A basic panel for your vineyard samples, or for your juice samples before or during fermentation.

*Brix (Hydrometer), pH, Titratable Acidity* **\$30.00**

## **Juice Panel (750ml sample)**

The juice panel provides a chemistry baseline for incoming juice. Understanding your juice chemistry baseline provides the needed information for juice adjustments prior to fermentation and ultimately a successful fermentation (a must for every winemaker). The juice panel includes:

*Brix (Hydrometer), Ammonia, Primary Amino Nitrogen, pH, Titratable Acidity* **\$75.00**

## **Post-Fermentation Panel (750ml sample)**

Use this panel to verify a successful fermentation to desired "dryness", in both alcoholic and malolactic fermentation. This panel includes:

*pH, Titratable Acidity, Alcohol, Volatile Acidity, Free SO<sub>2</sub>, Total SO<sub>2</sub>, Malic Acid, Glucose/Fructose* **\$95.00**

## **QC Panel (200ml sample)**

The QC panel provides baseline analysis from fermentation thru bottling. Recommended every 3 months for routine maintenance of your wines. Includes:

*Alcohol, Titratable Acidity, pH, Volatile Acidity, Free SO<sub>2</sub>, Total SO<sub>2</sub>* **\$66.00**

## **Basic Chemistry Panel (200ml sample)**

The basic chemistry panel includes standard tests for wine monitoring with the emphasis on maintaining wine protection. Recommended every 6 months. Includes:

*pH, Free SO<sub>2</sub>, Total SO<sub>2</sub>, Volatile Acidity, Titratable Acidity* **\$52.00**

## **Bottling Panel (2x750ml sample)**

The bottling panel provides worry-free baseline chemistry for bottling unfiltered wine. The wines are checked for fermentation stability, aesthetics and past bacterial spoilage prior to going into the bottle. The unfiltered bottling panel includes:

*Alcohol, Volatile Acidity, Titratable Acidity, pH, Free SO<sub>2</sub>, Total SO<sub>2</sub>, Malic Acid, Glucose/Fructose, Heat & Cold Stability* **\$110.00**

## ***INDIVIDUAL ANALYTICAL ANALYSES***

<b><u>Individual Test</u></b>	<b><u>Sample Size</u></b>	<b><u>Price/Sample</u></b>
pH	125ml	\$12.75
Titrateable Acidity	125ml	\$15.00
Free Sulfur Dioxide	125ml	\$15.00
Total Sulfur Dioxide	125ml	\$17.25
Volatile Acidity	125ml	\$19.50
Malic Acid	125ml	\$25.50
Primary Amino Nitrogen	125ml	\$32.25
Ammonia	125ml	\$32.25
Alcohol %	125ml	\$34.50
Brix Hydrometer	500ml	\$20.75
Brix Refractometer	125ml	\$14.00
Glucose/Fructose	125ml	\$25.50
Heat Stability	2x750ml	\$22.00
Cold Stability (Freeze Test)	2x750ml	\$32.00
Cold Stability (Conductivity)	2x750ml	\$35.00
Bentonite Fining Trial	3x750ml	\$82.00

(Prices subject to change)

## **WINEMAKING CONSULTING SERVICES**

As part of each standard analysis the ENOLAB staff provides brief answers when requested by our customers. However there are times when a winemaker has extended questions, or is looking for a second opinion on fermentation approaches, fermentation remedies or other to achieve better wine quality. When there is a need for in-depth discussions the laboratory is available on a consulting basis.

We consult on:

- Recommended fermentation products; yeast, bacteria, fermentation aids, enzymes, etc.
- Fermentation approach; cap management, racking techniques, etc.
- Fermentation remedies; what to do, what not to do.
- Winery setup; cellar, laboratory, etc.
- Wine quality assessment

Fees: ¼ hour minimum.....\$120.00 per hour

## **SENSORY CONSULTING SERVICES**

### ***Standard Sensory Evaluation***

For a standard evaluation, the consulting winemaker and enologist will evaluate the appearance, aroma, taste, and overall impression of the wine. Winemaking corrections will be recommended for wine with defects.

Written Sensory Evaluation.....\$45.00

*Please submit full bottles for sensory evaluation.*

# YEASTS

*The ENOLAB is the sole distributor of the ENOFERM line of specialty yeasts in the Northwest. ENOFERM was developed by Dr Paul Monk. Dr. Monk was the worldwide pioneer in bringing a wide range of yeast strains with desired enological properties to winemakers in the active dry form.*

## **L2056      *new!***

Rhone isolate for red and white fermentations. Selected for fruit aroma characteristics of Rhone wines.

**0.5 kg – \$53.50**

## **DV10      *new!***

Champagne isolate used for white wines and also suitable for base wines. Recommended for clean fermentations to preserve varietal fruit character while adding roundness and volume. Very useful for restarting fermentations.

**0.5 kg – \$53.50**

## **EC-1118, *Prise de Mousse*      *new!***

Used for whites, reds, and bottle fermentation in sparkling wines. Fast growing, vigorous fermenter, very low foaming. Clean, ester aromas. Alcohol tolerant, can be used for restarting stuck fermentations.

**0.5 kg – \$42.00**

## **BM45, *Brunello*      *new!***

Italian isolate selected for complex aroma and flavor contributions, enhanced mouthfeel, low astringency, color stabilization, high nutrient requirements, and tolerance for temperature and alcohol. Slow starter, moderate fermenter, recommended for Sangiovese and extended maceration wines.

**0.5 kg – \$53.50**

# **YEASTS CONTINUED**

## **QA23**

This is a very strong fermenting strain making it a good selection for barrel fermented chardonnay. The aromatic production of fresh, fruity white wines like Muscat, Sauvignon Blanc and Gewurtztraminer is enhanced by the B-gluosidase activities that work to release bound terpenes. Low nutrient requirements and the ability to ferment clarified juice with low solids content make this strain useful for most white fermentations.

**0.5 kg – \$51.25**

## ***Uvaferm 43***

Strain 43 is selected specifically for its ability to restart stuck fermentations. Isolated in the Rhone Valley, it has shown consistent properties for adapting to sluggish or stuck fermentations. It has been characterized by alcohol tolerance greater than 18% (v/v) and moderate/low nitrogen demand with good fermentation rate after lag time for adaptation to wine conditions.

**0.5 kg – \$53.00**

## ***ICV D21***

Languedoc isolate from 'terroir' valued for fermenting red with stable color, intense, up-front and mid-palate tannin structure. It can contribute higher acidity and enhanced mouthfeel. Moderate rate fermenter to 16% (v/v) alcohol. Tends to enhance varietal fruit character and can help reduce herbaceous character in Bordeaux varieties.

**0.5 kg – \$53.50**

## ***ICV D254***

Rhone isolate for red wines and Chardonnay. Enhanced mouthfeel and color stability due to polysaccharide-tannin complexing. Vigorous fermenter, upper temperature limit 29°C (84°C).

**0.5 kg – \$53.50**

Other specialty yeasts available upon request

# **MALOLACTIC BACTERIA**

*The ENOLAB offers two strains of freeze-dried bacteria.*

*Freeze-dried bacteria are grown in a juice-based medium, then freeze-dried for a preparation that provides a readily available large population of bacteria. It is more stable and is available for a longer season than the liquid. The bacteria should be stored in a freezer and is viable for up to one year. Instructions are included for reactivation and expansion to the appropriate inoculum volume.*

## ***Enoferm Alpha***

Direct-addition freeze-dried bacteria, selected by the ITV in Bordeaux, chosen for superior fermentation properties at low pH and low temperature. Improved tolerances for SO<sub>2</sub> and alcohol compared to other direct inoculum stains. This is an assertive strain with strong fermentation kinetics. If added to a wine with several stress factors, the addition of the nutrient Acti ML (See Nutrients) will encourage fermentation success. Notable sensory contributions include complexity and enhanced mouth feel

**2.5 g (for 66 gallons of wine) – \$24.25**  
**25 g (for 660 gallons of wine) - \$126.50**

## ***Enoferm Beta***

Direct-addition freeze-dried bacteria isolated in Italy. This strain is best used to enhance tannin structure and red berry varietal character. It derives the Beta name from the capacity to encourage higher levels of B-damascenone and B-ionone which contribute floral notes and red berry, especially in Merlot as shown in trials done near Bordeaux in Buzet Merlot. The strain is pH tolerant to 3.15, temperature tolerant to 12C (54F), and alcohol tolerant to 14% (v/v)

**2.5 g (for 66 gallons of wine) – \$24.25**  
**25 g (for 660 gallons of wine) - \$126.50**

## ***FERMENTATION NUTRIENTS & ADDITIVES***

*Nutrient additions to must support yeast (and bacteria) growth during fermentation while helping to avoid off aromas or flavors produced by nutrient deficient yeast populations. The ENOLAB's juice analyses and juice panel tests for ammonia and amino acids to assess juice nutrient levels (reference Analytical Panels and Individual Analytical Analyses).*

### ***Fermaid K***

A compounded formula that provides DAP, yeast hulls, vitamins and minerals.

**2.5 kg – \$69.00**  
**10kg – \$189.75**

### ***Go-Ferm***

Go-Ferm provides a source of yeast micronutrients that is added directly to the yeast rehydration water, and eliminates nutrient uptake by any microorganisms competing with the selected yeast. Go-Ferm can be used every time yeast is rehydrated and is especially recommended in high brix, high alcohol potential fermentations.

**1 kg – \$48.50**  
**2.5 kg – \$79.50**  
**10 kg – \$264.50**

### ***Diammonium Phosphate (DAP)***

DAP is added to juice/must to supplement natural levels of yeast assimilable nitrogen (YAN). Addition of DAP can stimulate yeast growth and fermentation activity and aids in prevention of the formation of hydrogen sulfide.

**1 lb – \$6.50**  
**50 lb – \$115.50**

### ***Tartaric Acid***

Tartaric acid is one of the main acids naturally found in grape juice, and is added during the winemaking process to reduce pH and increase the titratable acidity of a wine.

**1 lb – \$9.50**  
**5 lb – \$46.50**

### ***Acti ML***

Lallemand has developed a strain-specific nutrient for use with Enoferm Alpha. We still recommend the use of nutrients with direct-add bacteria only in high stress situations. These include stuck or sluggish MLF, or wine with more than two challenging conditions including *pH less than 3.45, alcohol higher than 14.5%, total SO<sub>2</sub> greater than 30 ppm or temperatures below 65F.*

**0.5 kg (for 660 gallons of wine) – \$28.00**

# ENZYMES

*Enzymes are used to obtain specific desired effects in winemaking such as improved color stability, enhanced mouth feel, increased complexity in wines, and to improve press yields or for clarification.*

## **Lafase HE Grand Cru      *new!*** **(premium reds)**

Lafase HE Grand Cru is a granular pectolytic enzyme with cellulase and hemicellulase side-activities. It enhances gentle extraction of softer tannins and flavors from the cell wall of mature fruit during the production of premium full-bodied red wines. Low anthocyanase activity helps promote color stability. Lafase HE Grand Cru has little effect on seed tannins. Its use can help reduce the amount of pumpovers required during the alcoholic fermentation, helping to avoid over-extraction and extraction of vegetal characters.

Dosage Range 20 - 50 g/ton crushed grapes; 110 - 165 g/1000 gal juice

**100 g - \$35.00**

## **Lallzyme EX-V** **(maceration – reds for fuller body, color stability and increased aging potential)**

For enhancement of wines destined for aging, Lallzyme EX-V, is a new enzyme formulated to increase the extraction of intracellular polyphenolic content from red grapes. The use of Lallzyme EX-V results in structured wines with deep, stable color due to the increase in tannin content. Aromatic profile analysis indicates the improved extraction of varietal aromas in Cabernet Sauvignon and Grenache.

Dosage Range 1 – 2 g/100kg (10 – 20 g/ton)

**100 g - \$40.00**

## **Scottzyme Color Pro** **(aged & early-market reds, whites)**

Color pro is a specialty pectinase with protease side-activities that break down the cell walls of red grapes to gently extract more anthocyanins, polymeric phenols, and tannins. This extraction process results in wines with a rounder mouthfeel, bigger structure, and improved color stability. Wines made with Color Pro tend to have increased tannins, improved clarity, and reduced herbaceous/'veggie' character. Color Pro is also used in white winemaking for settling and clarifying juice.

Dosage Range 60-100 mL/ton for reds, add prior to alcoholic fermentation.  
15-30 mL/ton or 75-200 mL/1000 gal for whites.

**1 kg – \$94.00 (available by the mL)**

## ***ENZYMES CONTINUED***

### ***Lafase Fruit*** ***(reds, rosés)***

Lafase Fruit is a purified granular pectinase blend used for the extraction of polyphenols during the maceration of fruit-forward wines. It allows for shorter maceration times with or without cold soaking to produce modern style red or rosé wines with fresh red fruit notes, color, and body.

Dosage Range 20-50 g/ton or 110-165 g/1000 gal

**100 g – \$35.00**

## ***FERMENTATION TANNINS***

### ***Fermotan***      ***new!***

Fermotan adds body and helps stabilize color. It is a proanthocyanidinic and exogenous tannin extracted from prized European oak varieties which, when added during fermentation, rapidly stabilizes red wine color and optimizes the level of noble tannins. It increases the quantity of stable grape tannins/anthocyanins compounds, through the formation of small quantities of polymerising acetaldehyde, preventing loss of color and reducing the astringency and coarseness of wines. Fermotan limits intense polyphenolic extractions that yield hard and bitter tannins, and restores the correct balance of soft-tasting tannins.

Dosage Range 1 - 4 lb/1000 gal.

**1 kg - \$31.00**

**15 kg - \$418.50**

# ***FINING AGENTS***

*Fining agents are used for wine stabilization and to aid in clarification, and also as tools to help shape and enhance a wine's texture and mouthfeel (harshness, bitterness, and astringency).*

## ***Gelatine Extra***

A hot water soluble, granular gelatin. Used to enhance wine structure, remove excess tannins, round out mouthfeel and enhance richness, especially in red wines. Also used for the clarification of white wines.

**1 kg – \$32.00**

## ***Electra Bentonite***

Activated sodium bentonite powder, this is the reference bentonite used for protein stabilization.

**1 kg – \$9.25**

**5 kg – \$28.75**

**25 kg – \$63.25**

# **CHEMICALS & SANITATION SUPPLIES**

## ***Efferbaktol SO<sub>2</sub> Granules***

Sulfur dioxide additions in an effervescent granular form, providing surface protection and self-mixing properties. Efferbaktol granules are also a simple and accurate way to make additions to tank, barrels, as well as grape bins.

2 g SO<sub>2</sub> sachets – \$.95 each  
5 g SO<sub>2</sub> sachets – \$1.50 each  
10 g SO<sub>2</sub> sachets – \$1.75 each

## ***Potassium Metabisulfite***

Acts as a potent antioxidant, preventing microbial spoilage and protecting the color and delicate flavors of the wine.

1 lb – \$2.50

## ***Copper Sulfate Crystals***

Copper sulfate removes any hydrogen sulfide (H<sub>2</sub>S) remaining in wines post-fermentation.

50 g – \$20.75  
100 g – \$30.00

## ***Trisodium Phosphate (TSP)***

A very effective detergent for cleaning and removing organic deposits.

1 lb – \$2.20

## ***Citric Acid***

An environmentally benign cleaning agent and neutralizes the acid in TSP.

1 lb – \$1.85

## ***Potassium Carbonate***

Lowers the acidity of high acid juices and wines.

1 lb – \$6.50

# New Customer Application

## Contact Information

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Name _____	Winery Name _____
Phone Number _____	E-Mail Address _____
Street Address _____	
City _____	Zip Code _____

## How Would You Like to Receive Your Results?

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E-mailed as an attached Word File  Mailed   
Faxed

## Billing Information

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We require credit card information all clients. However, if you don't want this to be the primary means of payment please initial here. \_\_\_\_\_

Card Type  
Visa  Master Card  Other \_\_\_\_\_

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_

## Winemaking Information

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Approximate Volume of Wine Produced Annually  
Varietals

## Non-Disclosure Agreement

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It is EnoLab's policy that all analytical results are confidential and will be shared only with client.