

2014
PRODUCT CATALOG



PRESQUE ISLE

WINE CELLARS

SINCE 1964

9440 W MAIN RD
NORTH EAST, PA 16428
WWW.PIWINE.COM



Welcome to the Art of Winemaking

PRESQUE ISLE
WINE CELLARS



At Presque Isle Wine Cellars, our passion is wine. We are also passionate about helping you in whatever way we can to craft extraordinary wine. Whether we are providing you with high quality grapes and juice or superior winemaking supplies, or answering your winemaking or product related questions, our knowledgeable staff is here to help you master the art and science of winemaking. **We have been serving the needs of home and commercial winemakers** for over 50 years, and we are also an award winning commercial winery, so we do know a little about wine.



Our catalog includes everything you need to make and enjoy your wine. We also offer various instructions and tips to help make you a more knowledgeable and confident winemaker, making your winemaking experience enjoyable and successful. We strive to keep current on the latest trends and innovations in the industry so that we may better assist our customers. Unsure about any processes? Give us a call and we will be happy to assist you with your wine.

Whether you are a beginner or a master winemaker, we hope you enjoy the process as much as we do, and if you have questions, please call. We would love to talk with you!

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How to Place An Order

1

piwine.com

Visit us online for a complete online catalog and pleasant shopping experience.

2

1-800-488-7492

Give our friendly staff a call and we will be happy to take your order over the phone.

We accept personal checks, Visa, Discover, Master Card and American Express.



We are available to take your calls Mon-Fri 9am-5pm, and Sat 9am-12pm.



Our desire is that you will be delighted with the products and service we provide. It is our intent to merchandise quality goods at fair and competitive pricing. We will work in good faith to remedy your problems and we will go beyond manufacturer's warranties, if fair and reasonable, to meet your satisfaction.

Price changes may occur if supplier rates change significantly, and for this reason the online catalog prices are current and supersede all other lists.

Have an idea that will help us serve you better? Please, share it with us!



2

1-800-488-7492

What's New at Presque Isle Wine Cellars

New Products This Year

We are always growing our product line to provide you with the most up to date and complete selection of winemaking supplies there is, so that your winemaking experience is as easy, fun, and delicious as possible.

Page 29



Hanna model HI2020 edge® pH kit
HI2020.....\$399.00

Page 28



Vinmetrica SC-50 MLF Analyzer™ Kit
SC-50.....\$119.00

You Crafted Your Wine, Now Brew Your Own Beer!

Beer Making Kits and Supplies are now available on page 40.



We are proud omniboires and enjoy a good ale as well as a good wine. We are happy to be able to now serve the needs of our friends and customers who have been lured by the beer crafting sirens.

Browse our all new beer making line, including a custom equipment kit to get you started, and ingredient kits for whatever style of brew you prefer. We can also provide you with yeasts and other beer making equipment and supplies that will help you to craft that perfect batch of brew.

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Wineries and Commercial Accounts

Our commercial customers are a very important part of our business. Where applicable we offer discounted volume pricing to meet your needs. Products designed for the commercial market are priced accordingly in this catalog and on our [website](http://www.piwine.com). For larger orders, or for products not listed in this catalog, please contact our sales department at **800-488-7492** for a custom quote. Our website has now been updated to include commercial pricing and to allow online purchases to be made on account for commercial account holders. Contact us about setting up a commercial account.

Be sure to visit us online at piwine.com to discover all of our new products, added regularly!

Welcome Beginning Winemakers

All winemakers have to start somewhere, and we are excited and eager to help you begin the winemaking process. The following **Beginner's Checklist** will help you to determine which items are essential to start your winemaking experience. Questions? Please call!



Education. A good guidebook will be your best investment. PIWC's *Beginner's Book of Winemaking* is a good and sufficient primer. We also recommend *Home Winemaking Step by Step*, and *Winemaking as a Hobby* is a good, more technical guidebook. See our [website](#) for these titles.

Raw Materials. Fresh juice or grapes are our preference. We offer fresh varieties in the spring and fall (page 6). Other fruits can also be used, and **concentrates** (page 8) are a great option if fresh juice is not available in your area, or is not in season.

Winemaking Kits (page 7). Our kits are economical and conveniently designed to have all of the necessary items that you will need to create your first batch of wine. Just add juice or concentrate.

Crusher and Press. For beginners we recommend using already pressed juice or concentrates, but if you choose to use whole fruit, it must be crushed, de-stemmed, and pressed. We offer the use of an on-site crusher, de-stemmer, and ratchet press to our fresh grape customers free of charge. We also offer crushers, de-stemmers, and presses for purchase (page 20).



Containers (page 24). Glass carboys, plastic fermentation containers, barrels, beer kegs, or stainless tanks can be used. You will need a spare container to transfer your wine each time it is racked.

- We recommend **Glass**

Carboys – typically 5 gallon size, but the 6 gallon is best when using concentrates or our juice pails. Carboys are long lasting, easy to clean, impermeable, do not deteriorate in storage, do not interact chemically with wine, and provide the ability to observe fermentation and settling.

- **Plastic Fermentation Containers** should be used for short term storage only, as they are permeable to air.

- **Barrels** can add wonderful characteristics and oak flavors to your wine, but are high cost, high maintenance, and



are not recommended for beginners. Barrels smaller than 30 gallons aren't recommended for wine. **Barrel Alternatives** (page 26) can achieve similar results with far less cost and hassle for the home winemaker.



Air Locks (page 24) allow gas to escape from your fermenting container, while shielding the contents from oxygen in the air. An air lock should be used with a compatibly sized rubber bung.

Chemicals (page 10).

- **Potassium Metabisulfite** (“Meta”) or **Campden Tablets** are sources of sulfur dioxide (SO₂), an essential antioxidant.

- **Tartaric Acid** or **Citric Acid** are added to grapes that are low in acid.

- **Calcium Carbonate** or **Potassium Bicarbonate** will help with reducing high acidity.

- **Potassium Sorbate** is a preservative that prevents re-fermentation in sweet wines, but must be used with “Meta”.

- Non-grape fruit wines require using **pectic enzymes, yeast nutrients, or yeast ghosts**.

Yeast (page 16). Yeasts convert sugars into alcohol during fermentation. Adding specially selected yeast cultures to your juice assures a more complete fermentation with less chance of unwanted odors and flavors, allows fermentation at cooler temperatures, and provides greater alcohol efficiency. Selecting the right yeast can also enhance varietal characteristics of your wine. Read the yeast product descriptions or refer to the **Yeast Selection Chart** on our [website](#) for help in selecting your yeast.



Cleaning and Sanitizing (page 38). Cleaning and sanitizing your equipment, containers, and bottles before and after use are vital steps in the winemaking process. Regular detergents should be avoided due to the amount of suds they produce. Bleach should also be avoided. Instead, we offer **OneStep, Soda Ash, B-Brite**, or **Professional Brewing Wash** to help with sanitation. Bottle and/or carboy **brushes** are also a cleaning essential.

Testing Instruments

- A **Hydrometer** (page 32) and hydrometer jar will be needed in order



to test sugar levels in your juice and wine.

- **Acid testing kits** (starting page 28) are useful to ensure that your acid levels are not too low or too high.

- Our **Free SO₂ Test kit** is also useful, as SO₂ is one of the most important and effective chemical tools in winemaking, and maintaining optimum SO₂ levels is critical throughout the process.

Transferring Wine (page 22). For racking (taking your wine off of settled lees) and bottling you will need to transfer your wine between containers. To avoid unnecessary agitation and aeration, wine should be siphoned, not poured. Five to six feet of food grade plastic tubing will work, but our



Page 22

specially designed **PIWC Bottling Siphon** unit is recommended for ease and versatility.

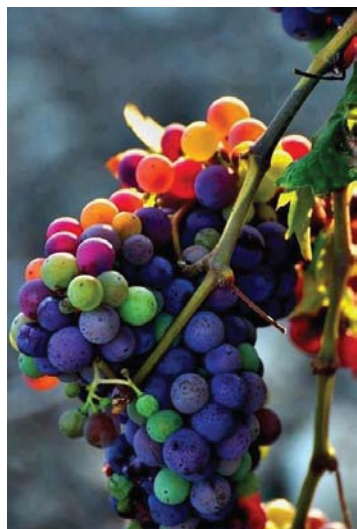
Clarifying. Removing impurities and suspended solids is essential to making a clear, attractive looking wine. **Clarifying agents** (page 14) such as Bentonite or Sparkoloid will help clear your wine faster and more thoroughly than settling the wine naturally. **Filtration** (page 34) will produce brilliantly clear wine almost instantly but is a much more significant investment, so clarifying agents are used by most home winemakers.

Bottling (page 36): To bottle your wine, you will need the **bottles** themselves, **bottle closures** such as **corks** or screw tops, and a **corker** to insert the cork securely into the bottle. We recommend corks, and after struggling with a hand corker for your first batch, you may want to consider a **floor model corker**.



Wine Storage: Choose a cool, dark, humid location if possible – basements are good. Optimal storage is at around 55°F. Excessive heat can hurt wine quality and the temperature should be kept consistent year round since dramatic changes can also be a problem. Optimum humidity is 65-75% and your wine should be stored horizontally to help keep the cork moist and well sealed without shrinkage.

Choosing Your Ideal Juice



Wine can be made from almost anything with natural sugars, but centuries of winemaking have shown that the grape is the best raw material. We offer high quality fresh grapes and pressed juices in season (see more on page 6) for pick up at the winery. If you are not within driving distance of PIWC, we also offer a wide variety of concentrates which are available year round, can easily be shipped, and will still provide you with a sound, quality wine. Our line of concentrate kits is listed on page 8.

A crusher and press are needed if using your own whole fruit or grapes. PIWC has both a crusher and press available on site for use, free of charge, by customers who purchase our fresh grapes. Others who wish to use the equipment on site may rent it for a nominal fee. For more information please call us or visit our [website](#).

Choosing Your Raw Material Source

Fresh fruit, fresh juice, and concentrates all have their advantages and disadvantages. The right material for you will depend on seasonality, your desired speed of the process, the level of investment you would like to make, and the level of convenience you seek.

Fresh Grapes and Juice

The use of fresh grapes and juices will result in the highest quality wine because they are:

- **Fresh.** No ingredients are added to prolong shelf life.
- **Intact.** The complex flavors and aromas of the grape are more intact than in concentrate juice
- More likely to produce a wine with the full body and natural varietal characteristics of the grape
- **Consistent in quality.** The grapes we sell are handpicked to maintain quality and consistency.

More on the variety of Fresh Grapes and Juices we offer is available on page 6.

See piwine.com/grapes-juices.html for more details, available varieties, specific dates, and to order fresh grapes and juice in season.

Concentrates

Wine Concentrate Kits are:

- **Easy.** Simple instructions and pre-measured ingredients provided.
- **Inexpensive,** requiring only a small investment in equipment.
- **Fast.** Wine can be bottled in as little as 4 weeks.
- **Always available.** There is no seasonality associated with concentrates, so these kits are available year-round

Concentrates are ideal for beginners because of their ease of use, and excellent for seasoned winemakers because they can offer unique flavors from vineyards around the world that may not be found in available fresh juice.

Check out our availability of concentrates for both traditional and fruit wine on page 8. Our Winemaking Kits (page 7) pair perfectly with concentrate kits. Purchasing both products ensures the winemaker has all the ingredients and equipment needed.

Home Winemaking Law

Under Federal Law any adult may make up to 100 gallons of wine per year and any household with two or more adult (18+) residents may make up to 200 gallons. A few states have lower limits than federal law allows so verify your state's laws.



PIWC Fresh Grapes and Juices



The best wine must start with the best ingredients. Using fresh grapes and juices provides the winemaker maximum purity and retention of the natural characteristics and complexity of the grape and the unique flavors and qualities from its local growing environment – its “terroir”. We are pleased to offer our customers quality fresh grapes and juices from two different harvest seasons each year, as well as from four premier grape growing regions:

- Fresh local **Lake Erie grapes and pressed juice**: Fall Harvest
- Fresh **California Central Valley** grapes and (*New this Season!*) juice: Fall
- Fresh **Chilean Juices** available in the Spring
- Fresh **Italian Juices** available in the Fall: *A New Offering!*

COMMERCIAL CUSTOMERS

We offer fresh bulk grapes/juice and custom crushing/pressing during the Fall season. We also offer bulk wine and custom bottling throughout the year. Contact us for more information.

To maintain quality and freshness, our grapes and juices generally cannot be shipped and must be picked up at our winery location (It’s a beautiful location worth the trip though!) unless special arrangements have been made.

Our Local Grapes and Pressed Juice

We purchase our grapes from a select group of dedicated local growers who continually seek ways to maintain and improve wine quality. We offer our customers the same grapes and juices that we use to produce our many award winning commercial wines. Grapes are pressed gently at low per ton yields for maximum quality. Juices are sulfited, settled, racked, and stored cold. Juice is not altered, other than adding enzymes and SO₂.

HISTORY: FRESH GRAPES AND JUICES AT PIWC

The sale of fresh grapes and juices is an important part of the PIWC business. Our founder comes from a family that has been growing grapes on the same farm since the late 1800’s. Our founders’ interest in producing better wines than were possible from the local grapes available at the time led to our pioneering local production of *Vitis vinifera* grapes in 1958, and French Hybrid grapes in 1959. Over 180 different varieties have been tried. Most have been discarded because wine quality was insufficient for the difficulty in growing them, or they were no better than already established varieties. The search for new varieties that match well with our local conditions continues and evolves.

PIWC staff will gladly give you guidance and make recommendations. Numerous varieties are available to meet the tastes of all winemakers, whether it is to produce sweet or dry wines, wines having local and regional appeal, or wines of a more traditional European style.

For more information, availability, and specific dates, visit piwine.com/grapes-juices.html.

SAVE
time and
money with our
winemaking
equipment kits.

Basic Equipment for making wine doesn't have to be complicated or expensive. Our kits are specially designed to make your winemaking endeavor an easy and rewarding experience. Each gallon of wine will yield 5 standard (750 mL) bottles of wine. These kits include all the equipment you need, except for the juice or concentrate, to make a batch of wine. See page 8 for available concentrates if fresh juice is not available or you prefer using concentrate.

An additional carboy will be needed when it is time to rack your wine. We recommend glass but plastic is okay for very short term storage. See page 24 for our container options.

Basic Winemaking Equipment Kit

There are some cheaper kits out there that use plastic carboys and less durable equipment. We only use glass carboys in our kits because, over time, plastic can allow oxygen transfer, hold and impart some odors, and break down and scratch. Glass carboys are airtight, easy to clean and sanitize, do not scratch or break down over time, and do not hold odors which could affect the taste of your wine.

- PIWC's "Beginner's Book of Winemaking"
- Glass Carboy - ribbed sides
- Drilled universal carboy bung
- 50 grams Potassium Metabisulfite
- Red Star Premier Cuvee Yeast (5 gram package)
- Plastic two bubble airlock
- Triple Scale Glass Hydrometer
- 14" Plastic Hydrometer Jar
- PIWC Racking and Bottling Siphon
- 16" Bottle brush
- 27" Carboy brush
- Small 8" funnel
- 24" Plastic stir paddle

Choose from a 3, 5, or 6 gallon carboy kit.

WK3	3 gallon glass carboy kit.....	\$51.19
WK5	5 gallon glass carboy kit.....	\$58.80
WK6	6 gallon glass carboy kit.....	\$60.59

Add a 7.9 gal. plastic fermenting bucket with lid

FB7.9	\$20.15
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Upgrade to the Deluxe Winemaking Kit

Upgrade your Basic Kit to the **Deluxe Winemaking Kit**, which includes everything you receive with the Basic Kit, and more.

Enjoy all of the items available in the Basic Winemaking Kit, as well as:

- Natural Micro-Agglomerated Corks (5 per gallon)
- Portuguese Twin Lever Hand Corker
- Deluxe Auto Siphon with tubing
- Dual Function Bottle Filler
- B-Brite Cleaner: 8 oz
- 7.8 Gallon Primary Fermenting Bucket, drilled for bottling spigot, with lid
- Bottling Spigot
- Adhesive Thermometer (36°-78°F)

Choose from a 3, 5, or 6 gallon glass carboy kit.

DWK3	3 gallon deluxe glass carboy kit.....	\$124.00
DWK5	5 gallon deluxe glass carboy kit.....	\$132.61
DWK6	6 gallon deluxe glass carboy kit.....	\$136.06



Concentrates

Today's concentrates have improved greatly in quality. Concentrates will produce sound wines, and are available to be delivered to your door year round. With easy to follow directions, and all of the required ingredients included and pre-measured, concentrates are an excellent choice. They also offer a wide range of varieties and blends that may otherwise be unavailable.

Vino del Vida

4 Week Premium Kits



Our Vino del Vida varieties consist of concentrate plus invert sugar. They weigh 17 pounds per kit and contain everything you need to produce 6 gallons of wine, except for the addition of water. You can produce a finished wine in about four weeks using the included instructions.

You can make a better wine if you follow a more leisurely production schedule. The kits provide instructions for either of these options.

4WSAUVBL	Sauvignon Blanc	\$72.95
4WCHARSEM	Chardonnay/Semillon.....	\$72.95
4WPNOIR	Pinot Noir.....	\$72.95
4WPGR	Pinot Gris.....	\$72.95
4WSHIRAZ	Shiraz.....	\$72.95
4WVALPOL	Valpola.....	\$72.95
4WGEW	Gewurztraminer.....	\$72.95
4WRIES	Riesling.....	\$72.95
4WCABSAUV	Cabernet Sauvignon.....	\$72.95
4WMER	Merlot.....	\$72.95
4WBAROLO	Nebbiolo.....	\$72.95
4WCHIANTI	Sangiovese Merlot.....	\$72.95

Concentrate Tip

By simply following the directions you can have a drinkable wine in 4, 6, or 8 weeks as prescribed by the kit. However, if you were to give the wine a little more time, you would have an even better wine.

Access the downloadable concentrate kit directions for your chosen brand by visiting our Concentrate page on our website: piwine.com/concentrates.html. You can then find your chosen brand and find the link to your downloadable instruction sheet.

Orchard Breeze

Fruit and Grape Kits



Bring some variety to your wine cellar with these popular kits made of fruit and grape juice combinations.

They produce wines of about 8% alcohol and are complete, including all pre-measured ingredients needed to produce 6 gallons of wine, except for the addition of water.

GAGEW	Green Apple Delight.....	\$64.95
PEACHCHARD	Peach Perfection.....	\$64.95
CHERRYPN	Very Black Cherry.....	\$64.95
BKBMERLOT	Blackberry Blast.....	\$64.95
CRANCHI	Cranberry Craze.....	\$64.95
ARCAB	Acai Raspberry Rapture.....	\$64.95
SOSAN	Seville Orange Sangria.....	\$64.95
STRAWZIN	Splendid Strawberry Blush.....	\$64.95
CRANCHAR	Cran Apple Chardonnay.....	\$64.95
BLSHIRAZ	Blueberry Bliss.....	\$64.95
BPVIO	Banana Pineapple Paradise.....	\$64.95
RASPZIN	Rockin Raspberry Rose.....	\$64.95

Alternative:

Presque Isle Wine Cellars Fresh Grapes and Juices

Remember that our concentrates are not your only option for a raw material for wine. If you live within driving distance to North East, PA, consider our fresh grapes and juices, available in the Fall (local, Italian, and California fresh juice) and in the Spring (Chilean juice).

For more information and availability, see page 6 or visit piwine.com/grapes-juices.html.

Cellar Classic

6 Week Premium Kits



These premium quality kits can make interesting and complex wines and boast genuine varietal character because they are selected from the finest 100% varietal grape juices and grape concentrates from the world's premier vineyards.

Kits contain 15 liters of juice and concentrate. Just add water to make 6 US gallons, which will yield 30

bottles of wine in 6 weeks. All the raw ingredients required are included in the kit.

6WBAROLO	Barolo.....	\$99.95
6WWZIN	White Zinfandel.....	\$99.95
6WBBIANCO	Bella Bianco.....	\$99.95
6WCABSAUV	Cabernet Sauvignon.....	\$99.95
6WCHARD	Chardonnay.....	\$99.95
6WGEW	Gewurztraminer	\$99.95
6WMER	Merlot.....	\$99.95
6WPGR	Pinot Grigio.....	\$99.95
6WRIES	Riesling.....	\$99.95
6WPNOIR	Pinot Noir.....	\$99.95
6WVALPOL	Valpolicella	\$99.95
6WVCDR	Vieux Chateau du Roi.....	\$99.95

Eclipse Series

8 Week Ultra Premium

*Our
Highest Quality
Concentrate*

Eclipse ultra premium wine kits are made with the **finest quality varietal juice** from around the world to produce wines that will satisfy the tastes of even the most discerning wine enthusiasts.

Our Highest Quality Concentrate!

Each concentrate kit will yield 6 US gallons, which will make 30 bottles of wine in just 8 weeks.

8WBAROLO	Barolo	\$155.98
8WMER	Merlot.....	\$155.99
8WRIE	Riesling	\$149.99
8WSYRAH	Shiraz.....	\$155.99



What may you need with your Concentrate Kits?



Winemaking Kits Page 7

See our [website](#) or call to ask about a discount for bundling and purchasing both a winemaking and concentrate kit.

Glass Carboys Page 24

Our recommended container for fermentation. An extra carboy may be useful for racking. Other containers are available, if an alternative is desired.



Wine Bottles Page 36

Whether you are making your wine from fresh juice or concentrates, wine bottles are always needed. We carry a variety of styles and colors, so you are sure to find one to fit your needs.



Chemicals and Additives

While there is no substitute for good fruit and diligent winemaking practices, there are times when the use of chemicals and/or additives is necessary and beneficial. Becoming familiar with what additives can deliver will provide the winemaker with additional tools that will aid in producing better wines.

The Use of SO₂ in Winemaking

This most versatile of chemicals comes as close as anything to being recommended for all wines. It inhibits molds, bacteria (including the malolactic strains) and yeast cells, but with the latter it is selective; most of the more desirable strains for wine fermentation are more tolerant of sulfites than other strains. It is an effective antioxidant, for which there is currently no suitable substitute.

Sulfur dioxide is a gas that is released into the wine or juice when potassium metabisulfite, campden tablets, or other sulfite compound is added. It will not act as a magical additive to prevent a wine from spoiling, nor will it restore one which has been abused, but it will aid in preserving an otherwise sound wine.

SO₂ is produced in normal fermentations and may occur even when no sulfur additives have been used.

The Many Uses of SO₂

- Add before fermentation to inhibit the wild yeast strains which are less tolerant of SO₂ than the cultured wine strains.
- Add at each racking, after fermentation has ended, and at bottling to retain the fresh flavors in wine. This is especially important with whites.
- Use these products to sanitize equipment and containers; SO₂ is an effective antimicrobial.
- Do not add during fermentation as it will encourage the production of acetaldehyde, which may adversely affect wine flavor.

For more detailed instructions and amounts to be used for each use, see page 46 for technical information and measures.

Antioxidants and Preservatives

Anti-Oxidants and Preservatives are essential additive tools used in winemaking. They contribute to sanitation, protect against undesirable oxidation reactions, and preserve your wine's color, flavor, and structure.

Potassium Metabisulfite Powder

(SO₂) Food grade. A widely used additive that kills wild yeast and bacteria, and acts as a potent antioxidant, protecting both the color and flavors of wine. Replace every year, as this product loses potency over time. 1/4 tsp. per 5 gal batch yields 40-45 ppm.



PM-1	130 gms.....	\$3.56
PM-2	600 gms.....	\$9.20
PM-38	10 lbs.....	\$36.60
PM	55 lbs.....	\$107.42

Campden Tablets (100 count)



Sodium metabisulfite. Alternative to potassium metabisulfite. Easy to measure tablet (0.55 gms ea.) 1 tab / gal. adds 75 ppm of sulfites. Use a Mortar & Pestle to grind into a fine powder before adding.

CT-100 100 Tablets.....\$3.91

Potassium Sorbate, Granular

Food grade. A yeast inhibitor used to prevent further fermentation in wines with residual sugar. Does not kill yeast nor inhibit the growth of malolactic bacteria. Replace every 6 months. 3/8 - 1/2 tsp. per gal yields 200-250 ppm. **Never add to a dry wine.**

PSB-1	55 gms.....	\$3.83
PSB-2	200 gms....	\$7.70
PSB-38	3 lbs.....	\$23.10
PSB	50 lbs.....	\$231.55



Mortar & Pestle, 60 mm.

Used to grind up chemicals into a fine powder.

MORTAR60.....\$4.39



Ascorbic Acid, USP



(Vitamin C) Powder.

An anti-oxidant used as a partial substitute for sulfur dioxide, or used to prevent oxidation, which creates a dull and unpleasant flavor, and to prevent discoloring

in the final product. Recommended for wines that discolor easily. Use 0.25 grams per gallon.

ASC-3	100 gms.....	\$11.76
ASC-5	400 gms.....	\$37.44
ASC-38	7 lbs.....	\$66.31
ASC	55 lbs.....	\$425.06

Using Ascorbic Acid

Ascorbic Acid, like Copper Sulfate, is often used to treat hydrogen sulfide (H₂S) or 'mercaptans', which presents as a rotten egg scent in your wine. Try treating first with Copper Sulfate but if the problem persists, then treatment with Ascorbic Acid will be necessary. If you have advanced H₂S 'disulfide', the scent could be described as burnt rubber or garlic-like and the wine will not improve with the treatment of Copper Sulfate alone. The use of 0.25gm Ascorbic Acid per gallon will often help by converting the disulfides back to mercaptans. The process may take up to three weeks, after which the wine should be treated with Copper Sulfate.

Acid Adjustment Agents

Acid Adjustment Agents will assist in balancing the acid content and pH of your wine to the ideal level. Acid content should be measured by using an acid testing kit (available on page 30). Wine low in acid will taste flat or dull, while high acid may be uncomfortably sharp. Acid and pH level are very important in relation to how well and how long a wine will age.

Phosphoric Acid: 25% solution

Used to lower pH when the maximum drop in pH combined with the minimum increase in titratable acidity is desired. We recommend using a pH meter when adding.

PHOS-250 250 mL **\$6.60**



Acid Blend Powder

Mixture of tartaric, malic and citric acids in a 40-40-20 ratio. Use 3.5 gms/gal to increase your acidity by 0.1%. Generally recommended for use in fruit wines.

AB-3 120 gms..... **\$3.45**

AB-5 454 gms..... **\$8.00**

AB-38 8 lbs..... **\$34.20**

AB 50 lbs..... **\$191.77**

Calcium Carbonate Powder



Used to **reduce the acidity** of wine or must. It reacts preferentially with tartaric acid over malic acid, so best practice involves adding it to a fraction of the wine and re-combining the frac-

tions after the reaction. 2.5 gms/gal will reduce acidity by 0.1%. This should be done as early as possible to allow for tartrate stability. Reduction of acidity by more than 0.3% can result in the taste of calcium ions. Replace every 5 years.

CC-5 300 gms..... **\$4.10**

CC-10 600 gms..... **\$5.70**

CC-38 8 lbs..... **\$20.85**

CC 50 lbs..... **\$90.25**

Titratable Acidity

Most of us prefer a wine with titratable acidity (T/A) in the range of 0.6-0.7% (6-7 mg/L). Sweet wine may benefit from higher acidity to balance out the sugar. A sparkling wine usually starts out at a higher acid level.

Citric Acid Powder, USP

Used to increase acidity at a ratio of 0.1% for each 3.4 gms/gal. Best practice is to add at the end of fermentation. Does not upset tartrate stability. Replace every 4 years.

CA-3 120 gms..... **\$2.60**

CA-5 454 gms..... **\$6.15**

CA-38 8 lbs..... **\$29.60**

CA 50 lbs..... **\$117.00**

Malic Acid Powder

Food grade. Used to make acid adjustments. Increases titratable acidity (T/A) by 0.1% for each 3.5 grams per gallon used. Malic will lower pH less than will tartaric. Replace every 4 years.

MA-3 95 gms..... **\$2.30**

MA-5 340 gms..... **\$6.00**

MA-38 8 lbs..... **\$23.50**

MA 50 lbs..... **\$112.50**

Potassium Bicarbonate Powder

Food grade. Used to reduce acidity of musts and wines. Can be used closer to bottling time in comparison with calcium carbonate. Use 3.4 gms/gal to potentially drop acidity by 0.1%. Cold stabilize when using to realize the full drop in calculated reduction of acid. Replace every 4 years.

KHC-3 150 gms..... **\$4.29**

KHC-5 500 gms..... **\$11.81**

KHC-38 8 lbs..... **\$46.77**

KHC 55 lbs..... **\$238.64**

Potassium Bitartrate (Cream of Tartar) Powder, NF

Used as a seeding agent to promote cold stabilization, and help to get tartrates to drop out faster at any otherwise effective temperature. Add 2-5 gms/gal and stir vigorously. Stir daily. Replace every 4 years.

KHT-3 115 gms..... **\$5.83**

KHT-5 454 gms..... **\$10.10**

KHT-38 8 lbs..... **\$43.68**

KHT 55 lbs..... **\$217.26**



About pH

pH reflects the concentration of the dissolved hydronium ion in a solution, which really is a measure of how active and powerful an acid or base the solution is. The lower the pH, the stronger the acid. Water has a neutral pH of 7, and wine, which needs to be slightly acidic, typically has a pH between 3.0 and 3.6. White wines have slightly lower pH than red. pH is not the same thing as titratable or total acidity (T/A). T/A measures the amount of specific acids (typically tartaric) present and is most pertinent to flavor and taste balance, while pH reflects the entire chemical environment in the wine. pH lower than 3.0 can inhibit malo-lactic fermentation. pH above 3.8 can make the wine more hospitable to undesirable molds and micro-organisms, increase spoilage risk, reduce the effectiveness of sulfites and other additives, degrade color stability, and reduce wine stability and longevity. pH out of desirable range, especially high pH, should be corrected by acid adjustment.

Tartaric Acid Powder, NF

Preferred acid for adjusting acid levels at beginning of fermentation. Low acid grapes from warmer climates and those with acidity below 0.5% will benefit from its addition—the wine will clear more readily, and keep and taste better. Used to increase acidity by 0.1% for each 3.7 gms/gal. Add early in the fermentation process. Replace every 4 years.

TA-3 130 gms..... **\$3.85**

TA-5 500 gms..... **\$12.25**

TA-38 8 lbs..... **\$51.20**

TA 55 lbs..... **\$298.35**

Chemicals and Additives

Pectic and Other Enzymes

Adding various enzymes offers advantages such as: better settling and sediment compaction, enhancement of aroma intensity, haze prevention, better color extraction, better color stability in reds, conversion of starch to sugar, 'free run' yield increases, and increased overall juice yield during crushing or pressing.

Zyme-O-Clear

A clarification enzyme used for settling primarily white juices (but also reds and other fruits), improving filtration rates, preserving the freshness and aromatic qualities of



the grapes, and increasing yield when added to the press. Eye protection recommended.

Liquid.

Use 1-4 drops/5 gals of juice, or 2-5 mL/ton of grapes or per 150 gals of juice.

ZOCL-21	1 oz w/ dropper...	\$10.94
ZOCL-22	4 oz.....	\$30.76
ZOCL-23	16 oz.....	\$122.56
ZOCL-GAL	1 gal.....	\$659.00

Powder.

Dilute in 10x its weight in water or must for better dispersion. 2.5 to 24 gms/ton of grapes or per 150 gal of juice.

ZOCP-3	50 gms.....	\$16.93
ZOCP-500	500 gms.....	\$119.10

Zyme-O-Color

Liquid. Use on red grapes to optimize the extraction of tannins, anthocyanins and aroma compounds from the skins during fermentation. Leads to increased color stability, especially when combined with tannins, as well as enhanced mouthfeel. Eye protection is recommended. Use 1-6 drops/gal or 2-37 mL/ ton of grapes.

ZCOLOR-21	1 oz w/ dropper...	\$13.76
ZCOLOR-22	4 oz.....	\$42.02
ZCOLOR-23	16 oz.....	\$164.55
ZCOLOR-GAL	1 gal.....	\$415.70



Zyme-O-Aroma

Extraction and stability of varietal aromatics in the juice will be enhanced when applied before pressing, while fermenting on the skins. Use 20-40 gms/ton. Eye protection is recommended.

ZOA-3	50 gms.....	\$12.71
ZOA-500	500 gms.....	\$58.51

Vin Lyso

Used to prevent growth of lactic acid bacteria and prevent or delay malo-lactic fermentation (MLF). Effective against many gram positive bacteria such as Oenococcus, Pediococcus and Lactobacillus. Also use to enhance the effectiveness of additions of sulfur dioxide to achieve microbial stability in both red and white wines. In must, use 10-20gms/hL; in wine, use 10-50 gms/hL.

LYS-3	50 gms.....	\$28.40
LYS-10	300 gms.....	\$111.88

Enzyme Tips

Pectic enzymes break down pectin, a stabilizer of cell walls, which weakens cell walls and can provide beneficial properties such as better pressing yields, better settling, better color extraction, enhanced aroma intensity, and haze prevention. Many enzymes perform multiple functions, but some are cultured for specific purposes, such as clarity or color enhancement.

It is okay to use multiple enzymes in a batch, but it is more economical to use the enzyme cultured for the highest priority results desired.

Colder juice or grape temperatures require higher enzyme dosage rates, or longer time.

Visit the [Winemaking 101](#) page on our website for more info on using and selecting enzymes or call our information line and we will be glad to assist you.

Yeast Nutrients

Yeast Nutrients provide critical growth factors required by yeast, and therefore give nourishment to the yeast so that it stays healthy, resulting in a smooth fermentation process. Fermentations lacking yeast nutrients are usually sluggish with a tendency to become stuck.

Diammonium Phosphate

Stimulates yeast growth, and is a useful addition to white wines lacking in natural nutrients. Can be used by itself or to augment some of the more expensive complete nutrients. Best if used early rather than later in the fermentation process. Use 1-3 gms/gal. Replace every 3-4 years.

DAP-3	130 gms.....	\$2.50
DAP-5	500 gms.....	\$7.05
DAP-38	8 lbs.....	\$21.25
DAP	50 lbs.....	\$94.50

Fermaid Yeast Nutrient Powder

Yeast food used to reduce the occurrence of sluggish or stuck fermentations. Contains diammonium phosphate, magnesium sulfate, yeast hulls, thiamine, folic acid, niacin and calcium pantothenate. Use may reduce the incidence of reduced sulfur compounds and volatile acidity. Use 0.5-1 gm/gal. Replace every 2-3 years.

FYN-3	100 gms.....	\$6.70
FYN-5	454 gms.....	\$25.80
FYN-38	7 lbs.....	\$99.30
FYN	22 lbs.....	\$195.62

SuperFerment Yeast Energizer

Complete yeast enhancer and energizer used to revive sluggish or stuck fermentations and promote rapid starts. Consists of a blend of minerals, vitamins, growth factors and trace elements. It contains all factors needed for optimal yeast reproduction and metabolism. Use 0.75-1.5 gms/gal. Replace every 2-3 years.

SF-3	82 gms.....	\$3.40
SF-5	364 gms.....	\$12.00
SF-38	6 lbs.....	\$47.80
SF	65 lbs.....	\$278.46



Yeast Nutrients (continued)

Yeast Hulls

Yeast hulls are energizers that prevent or boost sluggish or stuck fermentations. They consist of the insoluble fraction of yeast cells that supply lipids & sterols to the fermenting yeast and absorb the fatty acids, which tend to be toxic to yeast. Adding yeast hulls help the yeast to remain in better condition, allowing fermentation to complete more quickly.

Springcell (Nutrex 370)

Use 1.8-3.6 gms/gal.

YH-5	200 gms.....	\$5.40
YH-38	4 lbs.....	\$20.30
YH	50 lbs.....	\$150.15

Yeast Ghost

Use 1-2 lbs / 1000 gals. (0.45-0.90 gms/gal.) At rates above 3 gms/gal, off flavors and odors may occur.

YG-3	75 gms.....	\$9.40
YG-5	220 gms.....	\$23.60
YG-38	5 lbs.....	\$133.00



Yeast Enhancers

Yeast Enhancers will increase the likelihood that your yeast will create healthy cells, providing essential vitamins and providing basic survival factors needed for fermentation in a challenging environment.

Go-Ferm Rehydration Nutrient

Provides the proper micro-nutrients to feed your yeast and allow them to create healthy cells. Very effective in high alcohol situations. Add to tap water at about 110° F, add the yeast and hydrate for 30 minutes. Use 1.1 gms with 15 mL (tbs) water per gallon of juice.

GOFERM-3	50 gms.....	\$5.55
GOFERM-5	200 gms.....	\$17.57
GOFERM-38	4 lbs.....	\$102.53
GOFERM-10KG	10 kg.....	\$308.21



Optiwhite Yeast Derivative, Powder

Use in white juice at the onset of fermentation to increase mouth feel, prevent browning and protect fresh aromas during aging. Help reduce acidic perception in light and acidic whites and with high quality whites (intended for barrel aging) to help increase aging potential. Use 1-1.5 gms/gal in 10x its weight in juice or water. Stir before and during addition. Store in cool, dry place.

OPTIWHITE-3	50 gms.....	\$8.60
OPTIWHITE-2.5KG	2.5 kg.....	\$162.50

Opti-Red Nutrient for Yeast, Powder

Used to enhance roundness and color stability, improve structure and mouthfeel, as well as provide better tannin integration in red juices. Mix in 10x its weight in must or water and agitate wine before and during addition. Use 0.2gms/gal for early addition, and 0.7-1.1 gms/gal for later additions.

OPTIRED-3	50 gms.....	\$8.00
OPTIRED-2.5KG	2.5 kg.....	\$162.50



Malo-Lactic Nutrients

The addition of an organic nutrient, especially for malo-lactic bacteria, will improve the growth conditions for the bacteria and will encourage a faster, more successful malo-lactic fermentation.

MicroEssentials Oenos Powder

A complex nutrient formulated for growth and survival of malo-lactic bacteria. May provide 20-40% faster malo-lactic fermentation. Use in white wines and red wines that present challenging conditions. Recommended if your wine has: high alcohol high SO₂, low pH, or temperature extremes. Use 0.2 - 0.4 gms / gal.

ME-3	50 gms.....	\$5.80
ME-5	250 gms.....	\$20.75



Noblesse

A certified organic yeast derived nutrient for use in white or red wines. Wines exhibit a more intense perception of ripe fruit and overall roundness and softer finish. Tannic intensity in the mid-palate may be decreased. It can help reduce undesirable characters or sensations of dryness and also help sulfite-reductase potential, which limits development of sulfur off-odors. Usage rate is 30 g/hL. Rack within 72 hrs. Once opened, keep tightly sealed and dry.

NOBLESSE-5	250gms.....	\$23.85
NOBLESSE- 2.5KG	2500gms...	\$139.99

Color Enhancers

Color enhancers are used to deepen the color of your red wines, or to blush whites.

Grape Skin Extract

Very concentrated dark red-purple viscous liquid extracted from Vinifera grape skins. Used to enhance the color of your wine, but is neutral in flavor. Bench test is recommended for determining dosages.



GSE-21	1 oz.....	\$3.58
GSE-23	16 oz.....	\$14.45
GSE-GAL	1 gal.....	\$63.94
GSE-5GAL	5 gal.....	\$259.23

Antifoam

Excessive foam produced during the fermentation process of your wine can push up and clog your airlock. Use of antifoam additives prior to fermentation will prevent the production of foam.

Antifoam Liquid AF-72

A food grade silicone oil emulsion used to reduce surface tension and therefore reduce frothing. Use 3-5 drops in a carboy before fermentation becomes violent, then 2-3 drops if foaming occurs later.

AF-21	1 oz dropper bottle.....	\$3.50
AF-22	4 oz.....	\$5.80
AF-23	16 oz.....	\$11.75
AF-GAL	1 gal.....	\$68.00



Chemicals and Additives

Tannin Products and Mouthfeel Enhancers

Tannins contribute to taste, providing bitter and astringent flavors. They may also eliminate excess proteins, increase and stabilize red color pigments, reduce oxidation rates, aid clarification, improve aromas and mouthfeel and supply phenolics which contribute to positive health benefits. Tannins occur naturally in grapes, mainly as anthocyanins, catechins, and condensed tannins. Other tannins are extracted from barrels used in wine aging. These include hydrolyzable tannins, gallotannins, and elagitannins.

Arabinol

Enhances aromatics on the palate and improves the viscosity, weight, mid-palate and finishing on white and red wines. 2-4 ml/gal
Filtration: Does not plug membranes with pores of 0.45 microns or higher, but it could create issues in wines through tighter filters, especially cross flows. Once opened, should be used within 30 days.

ARABINOL-22	4 oz.....	\$4.99
ARABINOL-23	16oz.....	\$11.90
ARABINOL-GAL	1 gal.....	\$50.00
ARABINOL	25 KG...	\$170.00



FT Rouge- Red Wine Fermentation Tannin

Used to preserve the grapes' natural tannins so they can combine with anthocyanins to optimize stability of color and enhance mouthfeel. It gives anti oxidative protection and inhibits

oxidative enzymes, which are associated with browning. Usage rate is 0.76-1.9 gm/gallon, but bench trials are best practice. Store in cool dry place. Shelf life 5 yrs unopened and less if opened and repackaged.

FTR-3	50 gms.....	\$5.99
FTR-1KG	1 kg.....	\$65.15

Tannin Estate- Red Wine Cellaring Tannin

Enhances mid-palate and complexity while providing a measure of anti-oxidant protection. Fruit characters can be enhanced. Recommended when using older, tannin depleted barrels. Recommended use 0.19-1.1 gms/gal, but use bench testing to determine the best rates for your particular wine. Store in cool dry place. Shelf life is 5 yrs unopened, and less if opened and repackaged.

TE-3	55 gms.....	\$20.10
TE-1KG	1 KG.....	\$161.69



Grap'Tan PC Grape Seed Tannin

Used to complement the fining of red and rose wines, stabilizing protein in whites and stabilizing color in red wines during maturation. It augments the antioxidant and bactericidal effects of SO₂ and inhibits oxidizing enzymes. May be added to finished wines up to 3 weeks prior to bottling. Use 0.2-1.1 gms/gal with reds and 0.08-0.35 gms/gal with whites. Shelf life is 2 years.

GTPC-3	50 gms.....	\$36.70
GTPC	500 gms.....	\$358.16

Grap'Tan S Grape Skin Tannin

Add to finished wines up to 3 weeks prior to bottling to achieve phenolic balance, gain mid-palate character, reduce vegetative character, stabilize color in red wines and reduce "hot" alcohol taste. Use 0.2-1.1 gms/gal to red wines and 0.08-0.35 gms/gal to whites. Store in cool dry place. Shelf life is 5 years unopened-less if opened and repackaged.

GTS-3	50 gms.....	\$43.00
GTS	1000 gms.....	\$487.15

Glycerine (Glycerol) Liquid

Used to increase the sense of body and/or sweetness in wines. Use 1-3 tbs/gal, but we recommend running bench tests.

GLY-250	8 oz.....	\$9.45
GLY-GAL	1 gal.....	\$66.50



Fining and Clarifying Agents

Fining and Clarifying agents are additives that are used to make wine brilliantly clear. For most home winemakers, fining is often a suitable, and certainly a less expensive, alternative to filtration.

Volclay KWK Krystal Klear-Bentonite Powder

Use to clarify juice, wine, and cider, and prevent cloudiness while removing heat sensitive proteins. Bench test to find the best usage rate, but 1-2 gms/gal may be sufficient with 4-5 gms/gal if used during fermentation.

BN-5	1 lb.....	\$3.88
BN-38	8 lbs.....	\$10.70
BN	50 lbs.....	\$23.40

Potassium Caseinate (Kolorfine)

Powder. Use with white wines to clarify and reduce oxidized odors and freshen the wine. Also removes some brownish color pigments. Use 1-2 gms/gal, but as much as 3 gms/gal when color is the main concern. Hydrate in water for 2-3 hours and stir vigorously while adding to the wine. Replace each year.

CAS-3	55 gms.....	\$6.39
CAS-5	300 gms.....	\$20.49
CAS-38	5 lbs.....	\$92.95
CAS	50 lbs.....	\$696.15

Copper Sulfate

Used to remove hydrogen sulfide (H₂S) and other reduced sulfur compounds—the source of 'rotten egg' like smells. Use as soon as possible after the end of fermentation, if racking the wine once or twice during fermentation didn't eliminate the problem. Use bench tests to determine the minimum effective dose. If the wine tastes bitterly astringent, you have excess copper. Fine with bentonite or 2 gm yeast/gal to remove excess copper after treating.



Liquid 1% Solution

CS-21	1 oz w/ dropper.....	\$1.90
CS-23	16 oz.....	\$5.30

Liquid 10% Solution

CS10-23	16 oz.....	\$6.50
CS10-GAL	1 gal.....	\$26.00

Fining and Clarifying Agents (continued)



Isinglass Powder (Drifine)

A traditional proteinaceous fining agent derived from fish swim bladders. Used mostly for whites and sparkling wines, but will remove harsh tannins in reds. Requires no counterfining with tannin or keiselsol, no pH adjustment, and requires only 30 minutes of hydration, at or near 60°F. Use 0.01-0.1 gm/gal.

ISIN-3 40 gms.....**\$21.63**
ISIN-5 454 gms.....**\$110.78**

Gelatin Powder-100 Bloom

Traditional fining agent used to clarify whites or reds and to soften tannins or remove color in reds. Best used during the first 6 months, or there is a risk of a bitter flavor. When used with white wines, use an equivalent tannin or kiesolsol to prevent a gelatin haze. Dissolve in warm water and add to the wine while still warm. Use 0.5-1.0 gm/gal with whites and 1.0-2.0 gm/gal with reds.

GEL-5 300 gms.....**\$20.46**
GEL-38 5 lbs.....**\$89.10**

Kieselsool, 30% Silica Gel

Use with bentonite to give a more compact lees and with gelatin as a tannin substitute. When used with gelatin, add at least a day earlier. It may be used by itself to remove colloidal hazes. Use 0.5-1.5 gms/gal. **Do not freeze.**

KIES-23 16 oz.....**\$8.80**
KIES-GAL 1 gal.....**\$32.40**

Accurate Measures

Measurement is key when adding chemicals and additives to your wine. Too little or too much can severely affect the quality of your wine. See page 32 for the scales and other tools to accurately measure dosages of various chemicals and additives.



LiquaGel 50%

Used to remove the astringent tannins while leaving untouched the anthocyanins responsible for color. Helps to produce a softer wine less likely to oxidize. It improves taste by enhancing desirable tannins while removing aggressive undesirable tannins which improves body, suppleness and stability. Add slowly to juice or wine while thoroughly circulating. Use 0.1-1.5 mL/gal (less for whites and more for reds).



GEL50-23 16 oz.....**\$13.06**
GEL50-GAL 1 gal.....**\$59.00**

Natural Tannin Powder

Used for clarification of most fruit, vegetable and honey wines. It may be used ahead of gelatin with white wines as a counter fining agent, at a rate of 3/4 to 1 times the weight of gelatin used. It is not needed with red wines. Use 1 gram per 5 gallons of wine.



NT-3 60 gms.....**\$3.40**
NT-5 200 gms.....**\$9.60**
NT 1 lb.....**\$12.95**

Ovo Pure: Egg Albumin Based Clarifier

Used to eliminate astringent tannins and any existing oxidizable color matter. Especially recommended for applications where gelatin or casein are too aggressive. Add slowly to avoid formation of foam and mix well. Use 0.1-1.3 gms/gal in red wines and 0.1-0.9 gms/gal in white wines.

OP-3 50 gms.....**\$3.85**
OP-1KG 1 kg.....**\$35.50**

PVPP (Polyvinylpyrrolidone)

Used primarily with whites and provides rapid clarification and reduction in bitterness and brown colors in white wines. It reduces a lot of color in reds but improves the hue. Usage range is 0.4-3gm/gal.

PVPP-5 140 gms.....**\$9.60**
PVPP-38 3 lbs.....**\$53.52**

Reduless

Used to improve the overall quality of red and white wines by increasing roundness, smoothness, and reducing sulfur and phenol related defects. Reduless helps increase roundness and smoothness and can decrease phenol related defects. Recommended contact time is 72 hours after which it should be racked or filtered. Dissolve in 10 x its weight in water then add immediately to the wine and mix well. Use 0.38-0.57 gms/gal, but bench testing should be used to determine the best rate. Replace every 4 years.



REDULESS-3 100 gms.....**\$15.13**
REDULESS-5 350 gms.....**\$44.29**

Sparkolloid Powder (Hot Mix)

A fining agent that covers a broad spectrum of hazes. It is positively charged so attracts particles that have negative charges. It requires no tannin addition and is quite neutral in respect to flavor changes. Usage is 0.5-1.5 gm/gal.

SPP-5 120 gms.....**\$5.40**
SPP-38 2.5 lbs.....**\$25.70**

Super Kleer Liquid

Two part fining agent used to improve clarity, contains Chitosan and kieselsol.



Packets are suitable for 6 gallons of wine. Rack off sediment in 7-10 days. Used for both red and white wines. Shelf life is less than a year.
SKKC 150 mL 2 part packet.....**\$2.00**

Need Further Guidance?

For more information on measurements and formulas for adding chemicals and additives to your juices and wine, see page 46. Or, call us with your questions.

(814) 725-1314

Yeasts and Cultures

Yeasts

When added to juice, yeast consumes the sugars in the juice and converts them into alcohol and CO₂. This is the fermentation process that turns the juice into wine.

Natural yeasts exist in grapes and fruit that could initiate fermentation, but to rely on these wild yeasts can result in a stuck fermentation process or low quality wine. Our specially formulated yeasts will not only ferment more completely and effectively, but, because each yeast has its own unique flavor and style, they can also be selected to provide optimum stylistic qualities for different types of wines.

NOTE: Many strains are available by special order in 10 kg size to be drop-shipped from our supplier. Please call us for more information or to place your special order.



Lalvin 71B-1122 (71B)

S. cerevisiae. The 71B strain is a rapid starter with a constant and complete fermentation between 15° and 30°C (59° and 86°F) that has the ability to metabolize high amounts (20-40%) of malic acid. An excellent choice for blush & residual sugar whites, nouveau & young red wines. Also a good choice for late harvest wines.

71B 5 gms.....\$0.88
71B-500 500 gms.....\$43.50



Lalvin ICVD47

S. cerevisiae. A low-foaming quick fermenter that settles well and gives enhanced mouthfeel due to complex carbohydrates. Eases onset of malo-lactic fermentations. Recommended for white varieties such as chardonnay and rosé. Excellent for barrel fermented chardonnay, especially when blended with wines made from ICV D21.

D47 5 gms.....\$0.88
D47-500 500 gms.....\$61.20



Lalvin EC-1118

S. bayanus. The same strain as PDM, this low foaming yeast ferments over a wide temperature range and is good for both sparkling and still wines. Good for restarting stuck or sluggish fermentations. Often imparts subtle citrus like flavors. Under low nutrient levels this yeast can produce high amounts of SO₂ and may inhibit malolactic fermentation.

EC8 5 gms.....\$0.88
EC-500 500 gms.....\$40.20



Lalvin Bourgovin (RC212)

S. cerevisiae. This yeast is a low foaming moderate speed fermenter with good alcohol tolerance and maximum extraction in reds.

Good color stability. Alcohol tolerance to 16%, has medium nutrient needs. Use with a yeast nutrient for best results. Known to generate ripe berry, bright fruit and consistently produce Pinot Noir with good tannin structure.

RC212 5 gms.....\$0.88
RC212-500 500 gms.....\$62.85



Lalvin DV10

S. cerevisiae. Produces a low amount of foam, H₂S and SO₂. Recommended for premium white varieties such as chardonnay, gewürztraminer, pinot gris, late harvest grapes, fruit wine, as a sparkling wine base, and in cider production. Can be used to restart stuck fermentations and has been known to ferment up to 18% alcohol.

DV10-500 500 gms.....\$61.20



Lalvin BM 45

S. cerevisiae. This yeast was selected from world-class Brunello fermentation as a relatively slow starting yeast, allowing longer maceration times. It produces high levels of polysaccharides and brings out fruit and spice aromas. Creates increased mouthfeel, is good with Bordeaux & Sangiovese, and enhances fruit, rose and cherry liqueurs, sweet spice licorice and earthy elements. Has high nitrogen requirements.

BM45-500 500 gms.....\$62.85



Lalvin ICV D21

S. cerevisiae. Ideal for fermenting red wines with stable color, intense fore-mouth volume, mid-palate tannin structure and fresh aftertaste.

Known for its relatively good fermentation performance, even under high temperature and low nutrient conditions. Generally used for Merlot, Syrah, Zinfandel, Cabernet Sauvignon, and Chardonnay.

D21-500 500 gms.....\$61.20



Lalvin BM 4x4

S. cerevisiae, blend. This yeast is a blend of BM45 and a complementary strain chosen to provide all of the advantages of BM45 with even greater reliability under

difficult conditions. Gives a more dependable fermentation, increased aromatic intensity, color intensity and length of finish. Good with varieties such as Sangiovese, Cabernet Sauvignon, Grenache, Zinfandel, Nebbiolo and Chardonnay.

BM4X4-500 500 gms.....\$79.06



Lalvin ICV-D80

S. cerevisiae. A rapid starter with a moderate fermentation rate and alcohol tolerance up to 16%. It brings out rich concentrated fruit flavors in varieties like Zinfandel and Syrah and leaves

a long lasting licorice finish.

D80-500 500 gms.....\$61.20



Lalvin R2

S. bayanus. This yeast has excellent cold temperature tolerance (will ferment ≈45°F with adequate nutrient) and contributes fruity esters to the aroma

profile, making it a very good strain to use with varieties such as Riesling, Seyval or Vidal. Tends to produce VA without proper nutrition.

R2-500 500 gms.....\$61.20

Yeasts (continued)



Lalvin K1-V1116 (K1V)

S. cerevisiae. This yeast is a rapid starter with a constant and complete fermentation between 10° and 35°C (50° and 95°F), capable of surviving a number of difficult conditions, such as low nutrient musts and high levels of sulfur dioxide (SO₂) or sugar. This yeast tends to enhance the freshness of white grape varieties such as Sauvignon Blanc, Chenin Blanc and Seyval. Fruit wines and wines made from concentrates poor in nutrient balance benefit from the capacity of K1V-1116 to adapt to difficult fermentation conditions. Also restarts stuck fermentations. Highly recommended for dry whites, aged reds, and late harvest wines.

K1V 5 gms.....\$0.88
K1V-500 500 gms.....\$37.50



Red Star Montrachet #522

S. cerevisiae. Vigorous with high SO₂ and alcohol tolerance, this is a good general purpose yeast for reds and whites, but occasionally has H₂S problems. Tends to foam more than most strains. Works well to produce buttery wines.

MYT 5 gms.....\$0.74



Red Star Pasteur Champagne

S. bayanus. This yeast is moderately vigorous, with high SO₂ and alcohol tolerance. Fairly neutral, and generally used for still or sparkling wines. This yeast is fairly good with stuck fermentations, and is also tolerant to cooler temperatures.

CHP 5 gms.....\$0.74



Red Star Premier Cuvée

S. bayanus. Formerly known as Prise de Mousse, this yeast, like the Red Star Pasteur Champagne yeast, ferments over a wide temperature range and is good for sparkling and still wines. Good for restarting stuck or sluggish fermentations. Often imparts subtle citrus like flavors. Good with whites or reds.

PDM 5 gms.....\$0.74



Red Star Côte des Blancs

S. cerevisiae. This yeast is a slow fermenting, low foaming yeast that brings out floral and fruity notes in the wine. It won't go as high in alcohol as most other yeasts listed here, especially with a cool fermentation. Recommended for Chardonnay, Riesling, mead and cider, as well as fruit wines, because it imparts a fruity aroma in both red and white wines. Use with a yeast nutrient (Super Ferment or Fermaid, both found on page 12) for best results.

EP2 5 gms.....\$0.74



Red Star Pasteur Red

S. cerevisiae. A strong even fermenter that produces full bodied wines with complex flavors, especially with the Cabernet family of grapes.

PRED 5 gms.....\$0.74
PRED-500 500 gms.....\$19.96



Fermentis Springer Oenologie BCS103 Yeast

"The yeast for extreme conditions." *S. bayanus*. This yeast has strong fermentation characteristics including: low volatile acidity production, low nitrogen needs, a short lag phase, and excellent fructose assimilation. It yeast is tolerant of alcohol up to 18%, and is a good selection to restart a stuck or sluggish fermentation due to its high alcohol tolerance and low nitrogen requirement. It is known to give a clean fermentation that respects varietal character, and is suited for use on whites and reds such as Chardonnay, Zinfandel, and Syrah, and sparkling wine bases.

BCS103-500 500 gms.....\$28.95



Fermentis Springer Oenologie VR44 Yeast

"Killer Character Strain" *S. bayanus*. This yeast was selected in the Champagne region for its excellent fermentation characteristics and its resistance to extreme winemaking conditions. It is a strong fermenter with low foam and SO₂ production, and low nitrogen requirement. It is ideal for controlled temperature fermentation in white wines. Tolerant of alcohol up to 16%.

VR44-500 500 gms.....\$28.95

Yeast Usage Information and Tips

Selected yeast strains offer advantages such as:

- more efficient alcohol production
- the ability to ferment at cooler temperatures (wild yeasts in our climate tend to cut out below 60° F),
- the production of more granular, less easily disturbed lees,
- and the ability to withstand higher levels of SO₂.

Some strains of yeast (Such as 71B) offer properties such as:

- metabolizing a greater amount of malic acid during fermentation,
- bringing out more floral or fruity characteristics, or
- greater efficiency to ferment to higher levels of alcohol.

Matching Your Juice with a Complementary Yeast.

The differences in flavor attributable to most yeasts are subtle. The choice of yeast will not make fine wine out of mediocre fruit, but picking the right yeast can help optimize stylistic elements. Please refer to the individual yeast product descriptions and the **Yeast Selection Chart** on our [website](#) for recommendations on wine types best suited to the yeast's characteristics. If you are unsure as to which yeast to use, please give us a call, and our experts would be more than happy to assist you with your choice.

Storage. We stock several strains of yeast in 5 gram packets in dried form, which permits easy storage and startup. Each 5 gram packet is enough to start 5 gallons of wine by direct addition. Packets may be stored at room temperature or in the refrigerator. Some strains are also available in 500 gram packets which are enough for 500 gallons of wine. Expiration dates are on the packages. Once a package of yeast has been opened it will lose viability.

Adding to Your Wine. Typical usage rate for yeast is 1 gm / gallon of juice, but being a little short or a little long is not a problem as yeast reproduces to reach a number at which fermentation takes place. Being slightly long on usage amount simply gets the fermentation count up that much faster. Yeast may be added directly to the juice but it is much better to rehydrate first for up to 20 minutes in water at 90° to 105° F. Follow rehydration instructions and use a nutrient such as Goferm (page 13) for best results.

Yeasts and Cultures

Yeasts (continued)



Fermentis Springer Oenologic SC22 Yeast
S. cerevisiae. This is a neutral strain allowing the production of wines with great finesse while respecting the character of varieties. It is a rapid fermentation starter tolerant of alcohol up to 15%, requires medium nitrogen, produces a low amount of volatile acidity (0.15 g/L) and SO₂, and is ideally suited to barrel fermentation. It is well suited to such varieties as Chardonnay, Sauvignon Blanc, Chenin Blanc, Cabernet Sauvignon and Merlot.

SC22-500 500 gms.....\$28.95



Lallemend L2056 Yeast
S. cerevisiae. This yeast retains varietal aromas and flavors. Alcohol tolerant and low SO₂ and volatile acidity production. Maintains good color stability and excellent for fruit forward styles. Wines fermented with this yeast and then blended with wines made with D254 yeast have been shown to be interesting. Good for quick-to-market reds. Alcohol up to 16%

L2056-500 500 gms..... \$62.90



Lallemend Enoferm L2226 Yeast
S. cerevisiae. This yeast is highly recommended for reds that have a high brix (sugar) level. It gives characteristic aromas of black cherry, berry, and cherry cola in red wines. It is useful with sluggish or stuck fermentations. Use on wines such as Merlot, Zinfandel, Sangiovese, Barbera and Cabernet Franc. Alcohol tolerant up to 16-17%.

L2226-500 500 gms.....\$62.90



Lallemend D254 Yeast
S. cerevisiae. This is a low foaming yeast selected to ferment in low nitrogen musts. It contributes aromas of ripe fruit, cedar, and spiciness, and is especially good for varieties such as Syrah, and barrel-fermented Chardonnay. Alcohol tolerance of up to 16% when fermentation is aerated and the temperature is maintained below 82° F.

D254-500 500 gms.....\$62.85



Lallemend CY3079 Yeast: 500 grams
S. cerevisiae. This yeast was selected from the Burgundy region for the production of wine in the style of a white Burgundy. It is a slow, steady fermenter tolerant of cool temperatures (15°C/59°F) and high alcohol. Recommended for barrel fermented and sur lie aged Chardonnay.

CY3079-500 500 gms.....\$62.85

Creating and Monitoring A Successful Malo-lactic Fermentation

A Malo-lactic fermentation (MLF) is caused by the bacteria *Leuconostoc oenos* or *Lactobacillus spp.*, which converts malic acid into lactic acid and carbon dioxide.

Why should I use MLF?

Wines which have gone through MLF will typically be:

- 0.2-0.4% lower in total acidity,
- 0.2-0.3% higher in pH,
- reduced in fruitiness
- softer and more complex in character.

Advantages to MLF include:

- wine with more complex vinuous aromas
- improved biological stability in the wine

The characteristics created with MLF are often desirable in dry reds and in dry white wines that are aged with oak, such as Chardonnay, Viognier, Cabernet Sauvignon, Merlot, etc. Sorbate **should not** be added to a wine which is to (or may) undergo MLF. Malo-lactic Bacteria (MLB) transform sorbate into ethoxyesadiene, which has a strong smell of grass or geranium. When this aroma is perceptible in wine, the wine is generally considered ruined.

Use of the Other Additives

If an MLF is encouraged, do not add potassium metabisulfite until the MLF is complete. You may still want MLF to occur with a low acid red wine to achieve complexity, however, an acid adjustment upward with the appropriate additives may be required.

M-L fermentation is inhibited when free SO₂ levels are above 20 ppm, temperature is below 60 degrees F, fumaric acid or lactozyme (lysozyme) has been added, or the pH is below 3.2. Making the appropriate adjustments with the correct additives can be beneficial to the MLF process.

Timing

There are differing opinions as to when, ideally, to inoculate wine with M-L bacteria. Some suggest toward the end of the yeast fermentation, but there seems to be a growing trend towards co-inoculation, or conducting the yeast fermentation and the MLF at about the same time. The M-L bacteria may be added just a few days after the yeast was added.

Nutrients to Assist MLF

The addition of an organic nutrient, especially for malo-lactic bacteria (such as Micro Essentials) will improve the growth conditions for the bacteria and will encourage a faster, more successful MLF.

Micro-Essentials Oenos Malo-lactic Nutrient Powder

Will improve growth conditions for MLF bacteria and encourage a faster, more successful MLF (More details on page 13).

ME-3 50 gms.....\$5.80
ME-5 250 gms.....\$20.75

The Chromatography Test kit (PCKV, page 30) is a reliable way to test your wine, letting you know when your MLF has completed.



Malo-lactic Cultures

A malo-lactic fermentation (MLF) is a secondary bacterial fermentation which converts malic acid into lactic acid and carbon dioxide. The effects of this type of fermentation create characteristics that are desirable in many wines. Our malo-lactic cultures contain the necessary bacteria to initiate MLF. We are pleased to carry quality Viniflora M-L cultures produced by Chr.Hansen laboratories.



Viniflora Oenos

CHML2 1.5 gms.....\$17.25
CHML20 15 gms.....\$96.52

Viniflora CH35

35ML2 1.5 gms.....\$25.99
35ML15 15 gms.....\$149.01

Viniflora CH16

CHML16 1.5 gm...\$18.50
CHML16-15 15gm....\$101.92

Viniflora CH11

11ML15 15 gms.....\$108.11

The 1.5 gram size treats 66 gallons, and the 15 gram size is enough to treat 660 gallons.

The chart below describes each M-L culture and allows you to choose which will best fit your fermentation needs. Also see our selection of malo-lactic nutrients to assist your malo-lactic fermentation on page 13.

	Characteristics	Ideal Conditions	Difficult Conditions
Viniflora Oenos	<ul style="list-style-type: none"> •Very high fermentation speed •Clean and classic flavor profile •Low production of volatile acidity •Outstanding all around tolerance towards pH, temperature and SO₂. 	<ul style="list-style-type: none"> •Free SO₂ level below 30 ppm •Alcohol below 14% and pH above 3.3 •Temperature between 63° - 77°F (17 -25°C) •Optimum inoculation time is at or very near to the end of yeast fermentation, co-inoculation possible. 	<ul style="list-style-type: none"> •Free SO₂ levels above 30 ppm, •Alcohol above 14% •pH below 3.3 •Temperatures below 63°F (19°C)
Viniflora CH35	<ul style="list-style-type: none"> •Outstanding tolerance to low pH and elevated levels of SO₂ •Strong fermenter under harsh white wine conditions •Clean and fruity flavor profile •Low production of volatile acidity •Outstanding all round tolerance towards pH, temperature and SO₂ 	<ul style="list-style-type: none"> •Free SO₂ level below 30 ppm •Alcohol below 14% and pH above 3.3 •Temperature between 63°- 77°F (17 -25°C) •Ideal for co-inoculation 	<ul style="list-style-type: none"> •Free SO₂ levels above 30 ppm, •Alcohol above 14% •pH below 3.3, minimum 3.0 •Temperatures below 63°F (19°C)
Viniflora CH16	<ul style="list-style-type: none"> •Very high fermentation speed •Low production of volatile acidity •Outstanding tolerance to high alcohol levels in red wine •Excellent all round tolerance towards pH, temperature and SO₂ 	<ul style="list-style-type: none"> •Free SO₂ level below 30 ppm •Alcohol below 14% and pH above 3.3 •Temperature between 63° - 77°F (17 -25°C) •Optimum inoculation time at or near end of yeast fermentation. 	<ul style="list-style-type: none"> •Free SO₂ levels above 30 ppm, •Alcohol above 16% •pH below 3.3 •Temperatures below 63°F (19°C)
Viniflora CH11	<ul style="list-style-type: none"> •Very high fermentation speed •Low production of volatile acidity •Excellent all round tolerance towards lower pH, temperature and for higher alcohol levels 	<ul style="list-style-type: none"> •Free SO₂ level below 30 ppm •Alcohol below 14% •Effective in co-inoculation with yeast for difficult white wines with a low pH •Temperature between 59° - 77°F (15 -25° C) 	<ul style="list-style-type: none"> •Free SO₂ levels above 30 ppm •Alcohol above 16% •pH below 2.9 •Temperatures below 59°F (15°C)

Crushing and Pressing

Crushers, Crusher Stemmers, and Catch Stands



Fruit pressing is difficult and inefficient unless the fruit is broken open, because berries in the middle of the mass of the fruit in the press resist being ruptured. The crushing operation can be performed by hand with small batches, but the job is much easier with a crusher, or a crusher-stemmer if you plan to ferment on the skins. The crusher rollers should be close enough together to crush the fruit as it goes through, but not so close that seeds will be crushed. Stem removal is an advantage when making red wine because you avoid the bitter tannin flavors which result when you have a lot of stems in the fermenting must. Most models will remove about 85% of the stems.

A. Manual Crusher

Flywheel driven with aluminum rollers and an agitator. The hopper and flywheel are painted for easy clean-up. This is a crusher only, so it does not remove the stems. Set over a tub or bucket to catch the fruit, or see our catch stand.

CR5-A\$310.00

B. Motorized Crusher-Stemmer

This motorized crusher-stemmer crushes and removes the stems, and can process 1.7 tons/hour with its ½ HP motor. Constructed of all stainless steel, except for the rollers, which are aluminum. This product ships by truck freight ONLY.

SSCS.....Special Order- **Call for Pricing**

C. Custom Catch Stand 35" x 12" x 31"

Can be used with manual or motorized models to funnel must from the crusher into a narrower container. Custom fabricated locally to fit all of our crushers, this stainless steel hopper is longer and narrower than other options available. Includes removable baked enamel reinforced legs for easy transport

CSS1.....\$362.38

Ratchet Presses

A wine press can help immensely in separating juice from solids and maximizing yield. Less than full loads can be run with any size press, but it is better if the basket is full, so try to match the press size to your most common batch size.

NOTE: Stock may be seasonal so get your order in early for imported items such as these.

Double Ratchet Presses

These presses have wooden baskets with painted steel bases. All are double ratchet so both forward and backward strokes drive the press. Fruit is pushed down into a solid cake. Due to their size, the larger R35, R40, and R50 models can ONLY be shipped by truck freight. **Call for pricing and availability of these products.**



More on Wine Pressing

White grapes are more difficult to press. Expect to get one gallon of juice from 14 ½ to 15 pounds of grapes under ideal conditions, using crushed grapes and multiple pressings with thorough stirring of the cake between pressings.

Reds are much easier - a single pressing will usually yield one gallon for every 12 ½ to 13 pounds of grapes, when fermented first "on the skins" to break down the pulp.

SKU	Basket size	Volume & Capacity
R25	10 x 12"	4.0 gal & 54 lb..... Call for Pricing
R30	12 x 14"	6.6 gal & 89 lb..... Call for Pricing
R35	14 x 18"	11.0 gal & 149 lb..... Call for Pricing
R40	16 x 20"	16.0 gal & 216 lb..... Call for Pricing
R50	18 x 24"	33.9 gal & 458 lb..... Call for Pricing

See the following page for Fiberglass Screens (FGS36) or Nylon Straining Bags to line the inside of the ratchet press basket.

Straining Bags and Screens

Nylon Straining Bags

Used for separating and straining pulp and juice, especially when there is



no press available. Choose either a coarse or fine mesh bag, whichever will meet your particular needs.

NSBS fine mesh bag 10 x 23"..... \$4.55

NSB coarse mesh bag 18 x 32"....\$6.60

Fiberglass Screens

Perform the same function as bags, and are easier to use and clean. It is available in



36" widths and is sold by the foot. Line the inside of the bladder or ratchet press basket. Order 3 1/2 times the diameter of the press basket size.

FGS36..... \$1.25/ft

Pressing Aids and Yield Enhancers

Rice Hulls as a Pressing Aid

Rice Hulls improve internal drainage and make the grapes less slippery and less likely to shoot out through the slats during pressing. They should be sprinkled over the crushed grapes as you fill the press. This product must be stored dry so it does not become moldy.

Typical usage is 15 to 25 pounds per ton. One 50 pound bag is sufficient material for



2-4 tons of grapes.

RH10 10 pound bag.....\$11.50

RH50 50 pound bag..... \$13.60

Food Grade Grease Cartridges

Used in standard grease gun on machinery having incidental food contact. White, odorless, water repellent and excellent stay put characteristics when subjected to hot water or caustic solutions.

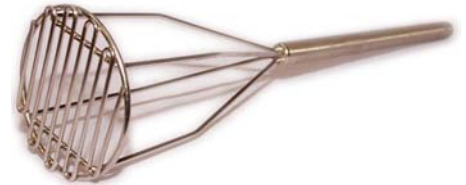


FGL2 14.5 oz cartridge.....\$14.95

Stainless Steel Cap Masher

For use during primary fermentation to push down the cap.

MASHER 24" handle w/5" disk..... \$36.00



Stainless Steel Must Plungers

Also used during primary fermentation to push down the cap.

36" handle w/8" disk

MP36.....\$49.00

48" handle w/10" disk

MP48.....\$79.00

60" handle w/10" disk

MP60.....\$89.00



Crushing and Pressing Tips

The way you crush and press your grapes will depend on the type of wine you are making. We recommend de-stemming all grapes during crushing, and have the following additional tips and information to ensure best results from your fresh grapes and juice.

White Wines

Grapes are crushed and pressed without much, if any, skin contact time. White wines can benefit from enzymes and other enhancers to extract the most juice and maximize other desired qualities.

See our selection of enzymes, as well as tips on using them.



Pectic and Other Enzymes: Page 12

Red Wines

To get both the true traditional character and color of a red wine, you need to ferment the grapes in contact with the skins with stems removed. Various enzymes, tannins and other enhancers can be of benefit and work best when used in conjunction with skin fermentation. Pressing is easier after fermentation because the pulp is mostly dissolved. Our 10-12" funnels with a straining screen work well for transferring the pressed wine into your container. Straining bags (see above) also work well to screen out solids.

Sparkling Wine

Process as a white wine. Lower sugar, higher acidity and more neutral flavors are desirable in juice used for sparkling wine. Blending two or more varieties can make a nice wine.

Good varieties from which to choose include: Pinot Noir, Chardonnay, Riesling, Valvin Muscat, Catawba, Seval Blanc, Pinot Blanc, and to a lesser extent, Vidal, Vignoles and Steuben. Chardonnay, of course, is used in the world famous wines of France's Champagne region.

Pumping and Transferring

Juice Pumps

These juice pumps are made by the Italian company Liverani. They are self priming and will handle liquids up to 120°F.



Mini-C brass head & impeller, 10 volt
Pictured above. A hand carry pump with a brass head and impeller, barbed ports, forward & reverse.

LMC110.....\$346.93

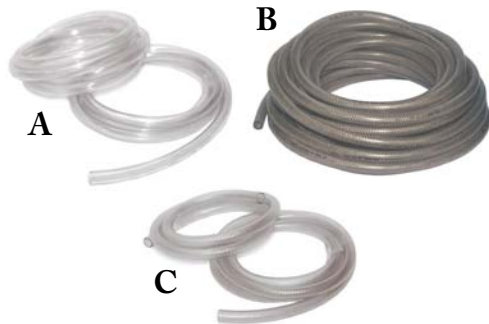
Mini-C stainless steel head & impeller, 110 volt
On a two wheeled cart, has a stainless steel head and flexible impeller. This is a special order item.

SSLMC110.....Call for pricing

For replacement parts please refer to our [website](#), or call us.

Hose and Tubing

A six foot piece of 3/8" or 1/2" polyvinyl clear tubing will make a suitable siphon hose. We carry food grade tubing so there is no concern with using this product with your wine or juice transfers. Maximum working temperature is 175°F.



A. Polyvinyl Tubing, Clear, Food Grade

PVT25 1/4" ID.....\$0.25/ ft
PVT38 3/8" ID.....\$0.39/ ft
PVT50 1/2" ID.....\$0.70/ ft
PVT63 5/8" ID.....\$1.11/ ft
PVT75 3.4" ID.....\$1.67/ ft
PVT100 1" ID.....\$2.84/ ft

B. Nylobraid Tubing

Reinforced with heavy cord embedded in the plastic tubing, clear, food grade.

NB63 5/8" ID.....\$1.34/ ft
NB75 3/4" ID.....\$1.63/ ft
NB100 1" ID.....\$2.09/ ft
NB150 1 1/2" ID.....\$3.58/ ft

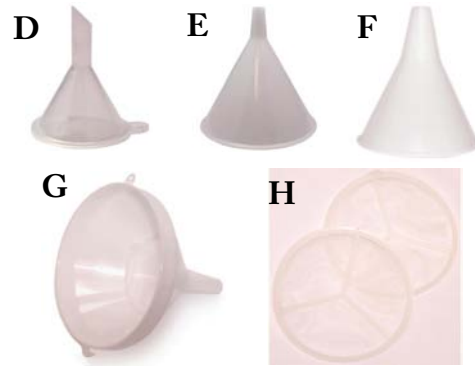
C. Ribbed Tubing

Accordion' like, which gives strength.

PST75 3/4" ID.....\$1.81/ ft
PST100 1" ID.....\$2.94/ ft
PST150 1 1/2" ID.....\$4.18/ ft
PST200 2" ID.....\$5.10/ ft

Funnels

We have several funnel options to meet your particular need. All our funnels have ribbed sides to allow venting of air. Some of the funnels come with a removable snap-in strainer screen.



D. Buret Funnel

28 mm top, 6 mm outside stem

FBUR.....\$3.25

E-F. Carboy Funnels

E. FS small neck spout.....\$3.10
F. FL large neck spout.....\$3.30

G. Funnels with Screens

F8 8" funnel with screen.....\$6.35
F10 10" funnel with screen.....\$8.85
F12 12" funnel with screen.....\$8.95

H. Replacement Screens for Funnels

F8S replacement screen 8".....\$2.94
F10S replacement screen 10".....\$2.94
F12S replacement screen 12".....\$2.94

Siphons



I. PIWC Bottling Siphon

Simple, practical, and versatile. Insert the bung and start flow by blowing, not sucking, on the

starter tube in the bung. Once flow is started the bung seal should be broken to create greater flow. Shut off flow with a pinchcock or by hand squeezing or crimping. Adjustable for gallon jugs up to 7 gallon carboys.

BSI.....\$10.20

J. Auto-Siphon Racking Tube

These racking tubes consist of rigid plastic outer and inner tubes, configured with a gasket so they work like a pump. Lower into the container, pump the small tube a couple of times and the siphon is started. Comes in two sizes: 3/8" or 1/2". Tubing sold separately.

FAS1 fits 3/8" ID tubing...\$9.90

FAS2 fits 1/2" ID tubing.....\$15.05



Racking Tubes and Parts

All made of rigid plastic. We have found the bucket clip or the siphon holder to work well with carboys and buckets using the 3/8" tubing and/or racking cane.



K. Racking Canes

RT24C 24" uses 3/8" ID tubing...\$2.00
RT30C 30", uses 3/8" ID tubing..\$2.60
RTL30C 30", uses 1/2" ID tubing.....\$5.20

L-M. Other Parts

L. BCLIP Bucket Clip, holds 3/8"...\$2.50
M. CSH Siphon holder.....\$2.85

Fermenting and Racking

Variable Capacity Tanks and Accessories

These open top stainless steel tanks with floating lids permit variation in the volume of wine stored and can be used for fermentation, storage and bottling. The lids have a built in air lock and an expandable rubber gasket with an attached air pump. Most tanks have only one side opening at the bottom where the spigot/valve attaches. Inquire about an option for an improved valve system for the non-tri clamp system. The smaller tanks (26 – 132 gallon) can be set up with tri clamp fittings as a custom order item. The larger tanks come set up for tri-clamp, and a tri-clamp butterfly valve assembly comes with the tanks. All tanks will be shipped by Truck Freight with the exception of the 26 gallon (VWT26C). Tanks are 18 gauge stainless steel.



VWT211C: Tri-Clamp Bottom Opening



VWT132C: Bulkhead Bottom Opening

NOTE: These tanks are special order- call for pricing and availability. Ample supply of varied stainless steel fittings, including tri-clamp fittings and butterfly valves, are available, please inquire.

SKU	Gallon Capacity	Liter Capacity	dia x ht	bottom opening	Price	Replacement Air Gasket (AG)	AG Price
VWT13C	13 gal	50 L	14.5 x 20"	Bulkhead	Special Order- Call for Pricing	AG35	\$38.00
VWT26C	26 gal	100 L	16.25 x 29.5"	Bulkhead		AG40	\$35.64
VWT52C	52 gal	200 L	20 x 39.5"	Bulkhead		AG50	\$35.64
VWT79C	79 gal	300 L	24.5 x 39.5"	Bulkhead		AG60	\$38.88
VWT106C	106 gal	400 L	29.5 x 40.5"	Bulkhead		AG75	\$50.22
VWT132C	132 gal	500 L	28.3 x 49.25"	Bulkhead		AG70	\$46.98
VWT211C	211 gal	800 L	36.25 X 49.25"	Tri-clamp		AG95	\$58.32
VWT264C	264 gal	1000L	36.25 x 59"	Tri-clamp		AG95	\$58.32



Air Pump
Replacement for variable capacity tank.
VWT-AP.....\$66.30



Pressure Gauge
Replacement for air pump (VWT-AP).
APPG.....\$14.25



Airlock
Replacement for tank with 1 7/8" hole.
VWT-AL125.....\$8.85
VWT-AL150.....\$8.85

Mixers and Accessories

The **Handle** clamps around the neck of the carboy to aid in moving it, and works on all size carboys. The **Cap** fits over the neck of the carboy and can hold an airlock or racking tube. The **Carboy Drain** holds an inverted carboy to allow draining. The stainless steel **Oak Chip Infusion Tube** can be filled with oak and inserted into the carboy. The **Brew Hauler**® forms a harness with nylon straps to lift or carry the carboy. Care must be used to be sure the harness is positioned correctly so the carboy doesn't slip out. The **mixing rod** can be attached to your drill and will mix or degas the contents of carboys, barrels and small tanks. The **spoon** or **paddle** can be used for stirring in a bucket, but will not fit into a carboy neck.

Carboy Caps

- A. CARCAP fits 3, 5 and 6 gal carboys\$2.60
- B. CCP7 fits 7 gal carboys.....\$2.60

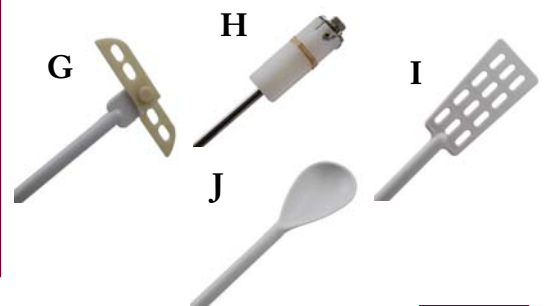
Carboy Accessories

- C. CARH Carboy handle.....\$8.75
- D. CAR-D Carboy Drain, blue plastic.....\$8.43
- E. OFT5/6 SS oak chip infusion tube.....\$29.05
- F. TBH Brew Hauler® carboy harness.....\$14.68



Mixers

- G. PMR Plastic mixing rod.....\$17.90
- H. STIR SS mixing rod.....\$24.64
- I. PS24 Stir paddle, plastic 24".....\$3.72
- J. RHS28 Round head spoon, 28".....\$4.70



Bulk Containers

The right container to use depends on various factors, including the size of your batch, the stage of winemaking, and how long the wine or juice will be in the container. We carry various containers to meet your needs, as well as a variety of air locks and accessories to aid in the winemaking process.

Carboys, Jugs and Fermenting Buckets

Glass Carboys and Jugs

We recommend glass carboys and jugs for small batches of wine. Plastic bottles and containers allow excessive oxygen transfer, and may also impart off flavors. You may confidently ferment and bulk age in the glass carboys.



C. One Gallon Glass Jug

Four jugs are included in each case.

W10 One gallon glass jug \$16.53/case

D. Glass Carboys

CAR3 3 gallon glass carboy..... \$26.46

CAR5 5 gallon glass carboy..... \$32.15

CAR6 6 gallon glass carboy..... \$33.93



Plastic Fermenting Bucket

The fermentation bucket is great for a primary fermentation, especially if you are fermenting on the skins. The bucket is also handy for transporting fresh grapes or juice when purchased here at PIWC. This bucket is 7.2 gallons and includes the lid.

E. FB7.9..... \$20.15

Air Locks

Air locks let fermentation gas out, while keeping air from reaching the wine. A drilled (bored) bung is needed to use the airlock in a carboy or jug. See the following page for our selection of Bungs and Stoppers.

A. Two Bubble Plastic Air Lock

Most popular air lock, but not as easy to clean.

PLB.....\$1.05



B. Canister Style Plastic Senior Lock

Easier to clean air lock that requires less head space.

PLS.....\$0.93

You May Also Need

Wine Bottles. Page 36

After using your carboys and buckets to ferment your wine, you will need bottles. We carry a variety of styles, sizes and colors, so you are sure to find one to meet your needs.



Brushes and Other Cleaning Supplies. Page 38

Sanitized containers are vital in winemaking to prevent contamination and, eventually, ruined wine. See our variety of cleaning and sanitizing equipment to ensure sound wine.



Bungs and Stoppers

We carry rubber stoppers that are sulfur free, pure gum rubber as well as large diameter silicone barrel bungs. Bored means there is a hole in the middle to hold an air lock. Sizes range to fit from less than 3/4" opening, like the opening of a wine bottle, to 3" openings. We carry the solid and bored bungs in each size to meet your particular needs. See the following chart to find which rubber stopper will work for you.



Solid Bung



Bored Bung



Solid Barrel Bung



Bored Barrel Bung

Tail Diameter		Top Diameter		Solid		Bored		Will Fit
Mm	inch	mm	inch	SKU	Price/bung	SKU	Price/bung	
17	0.67	20	0.79	RS2	\$0.30	RB2	\$0.25	RB2 - 750mL Btl
19	0.75	25	0.98	RS3	\$0.39	RB3	\$0.44	RS3 - 750mL Btl
25	0.98	29	1.14	RS5.5	\$0.50	RB5.5	\$0.50	
27	1.06	33	1.3	RS6	\$0.80	RB6	\$0.79	1 gal jug
28	1.1	34	1.34	RS6.5	\$0.99	RB6.5	\$0.80	CAR 3, older 5,6,7
32	1.26	37	1.46	RS7	\$1.04	RB7	\$0.98	CAR2,8, New 5
32	1.26	40	1.57	RS7.5	\$1.14	RB7.5	\$1.24	
34	1.34	41	1.62	RS8	\$1.14	RB8	\$1.24	
37	1.46	44	1.73	RS8.5	\$1.26	RB8.5	\$1.24	
38	1.5	46	1.81	RS9	\$1.28	RB9	\$1.26	Small barrels
39	1.54	46	1.81	RS9.5	\$1.46	RB9.5	\$1.48	Plastic water jug
43	1.69	50	1.97	RS10	\$2.29	RB10	\$1.60	
46	1.81	52	2.05	RS10.5	\$1.99	RB10.5	\$1.93	
49	1.93	56	2.2	RS11	\$3.48	RB11	\$2.59	Large barrels
51	2	62	2.44	RS11.5	\$3.49	RB11.5	\$2.91	
54	2.12	64	2.5	RS12	\$4.48	RB12	\$4.49	
58	2.28	67	2.63	RS13	\$4.89	RB13	\$4.89	Plastic Drums
62	2.44	64	2.53	RS13.5	\$7.21	RB13.5	\$8.76	
76	2.99	89	3.5	RS14	\$8.55	RB14	\$8.25	

Silicone Barrel Bungs

Our silicone barrel bungs are FDA approved silicon. The bungs have a top lip for easier gripping. These are a size #11 bung and will fit large barrels.

Barrel bungs pictured to left.

Bored Silicone Barrel Bung

Fits 53 and 59 gallon barrels.

SB11S.....\$6.20

Solid Silicone Barrel Bung

Fits 53 and 59 gallon barrels.

SB11B.....\$6.20

Universal Carboy Bungs

Available in solid and bored, these are great to use in most carboys. They span the size of a 6.5 to 7 rubber stopper and can be inverted and placed over the top of a wine bottle as well.

Bored Universal Bung

Fits 3, 5, and 6 gallon carboys

UCBD.....\$0.76

Solid Universal Bung

Fits 3,5 and 6 gallon carboys.

SUCB.....\$0.76



Bored Universal Bung



Solid Universal Bung

Barrels and Barrel Alternatives

Oak barrel usage is a tradition, and lends quality with a touch of class to a wine cellar. Oak aging imparts flavor and aroma that cannot be duplicated by other containers. Whether it's the traditional oak barrel, or a more inexpensive barrel alternative, let us provide you with the equipment you need to infuse an oak flavor into your wine.

Mercier Oak Barrels



Presque Isle Wine Cellars is pleased to be the Eastern U.S. representative for the superior quality Tonnellerie Mercier French Oak Barrels. Mercier should be part of the equation for the commercial or discerning home winemaker when producing premium wine that is crafted to last. You can taste the difference.



What is the Mercier Advantage?

Family Affair. Like PIWC, Mercier is a small family run business with personal involvement and commitment to quality and craftsmanship.

Excellent Price to Quality Ratio. Artisanal quality without the artisanal price.

Harmony and Synergy. Mercier barrels work in harmony with the local and natural characteristics of your fruit.

“Customization.” Diverse product options allow you to “customize” your barrel characteristics (forest selection, grain selection, toast style and toasting level) within a cost effective production volume framework.

Toast is Critical. The ability to select from four Toast Levels to best match the variety is an invaluable tool to enhance wine quality and character, especially with Eastern Grapes.

Our Experience. PIWC has used Mercier barrels in our own award-winning wine production. Any time we have worked with Mercier barrels and performed side by side trials with other barrels, the Mercier barrels have never overpowered our wines with wood as have some others. While imparting the nuances and rich character that is expected from barrel aging, these barrels also preserved our terroir and varietal characteristics and enhanced the overall quality of the wine.

Mercier products are special order items. Please call us for pricing and availability.



Barrel Racks

Seasonal, Call for Availability. Rugged, metal, powder coated, beige racks make barrel storage easier and make use of overhead space. Except for the floor level model, they can be stacked up to four or five levels. The refurbished model should only be stacked two levels high.

A. One Barrel Reversible Rack

One side for 30. The other for 53 or 59 sized barrels.

BRR.....\$102.95

B. Two Barrel Stackable Rack

For 53 or 59 gallon size barrels.

BR2.....\$118.34

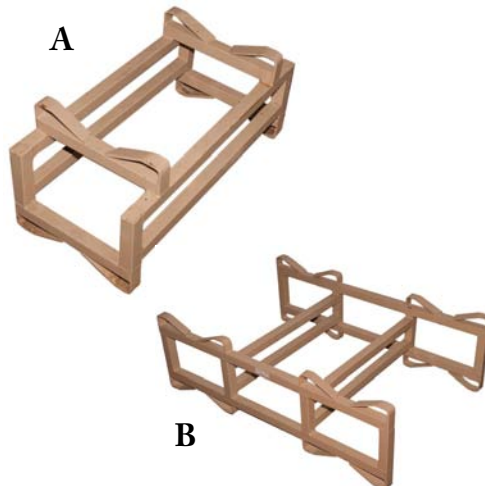
Two Barrel Floor Level

BR2-BASE.....\$111.69

Two Barrel Refurbished Barrel Rack

For 53 and 59 sized barrels, with single crossbar.

BR2-RE.....\$86.98



American Oak Barrels

American Oak Barrels

A range of barrel sizes are available, from 5 to 30 gallons, based on availability.



All of our quality barrels are special order items. Please call for pricing and availability.

Barrels and Barrel Alternatives

Barrel Alternatives

Granular Oak

A great alternative when barrels are not your preference, granular oak will infuse an oak flavor into your wine.



Oak-mor premium, medium toast	
OMP-34	500gm... \$6.15
OMP-35	5 lbs..... \$24.85
Oak-mor toasted, heavy toast	
OMT-34	500 gm.. \$7.96
OMT-35	5 lbs..... \$31.55

Oak Chips

Used to emulate oak aging without the difficulties of working with a barrel.



American oak chips, medium toast	
AOCMT-34	500gm... \$3.50
AOCMT-35	5 lbs..... \$14.00
American oak chips, heavy toast	
AOCHT-34	500gm... \$3.50
AOCHT-35	5 lbs..... \$14.00



French oak chips, medium toast,	
FOCMT-34	500 gm.. \$7.80
FOCMT-35	5 lbs..... \$31.20
French oak chips, heavy toast	
FOCHT-34	500gm... \$7.80
FOCHT-35	5 lbs..... \$31.20

Oak Infusion Spirals

There are two spirals in a package for 6 gallons (1 barrel), or you can use one spiral for 3 gallon batches. Some varieties come in a larger size (6 9" spirals in mesh), which will treat 59 gallons.



Oak Spirals: American oak light toast	
OISAL	treats 6 gal..... \$9.92
Oak Spirals: American oak medium toast	
OISAM	treats 6 gal..... \$9.92
OISAM-59	59 gal.... \$54.00
Oak Spirals: American oak heavy toast	
OISAH	treats 6 gal..... \$9.92
OISAH-59	59 gal.... \$72.90
Oak Spirals: French Oak Light Toast	
OISFL	treats 6 gal..... \$16.05
Oak Spirals: French Oak Medium Toast	
OISFM	treats 6 gal..... \$16.05
OISFM-59	59 gal.... \$105.30
Oak Spirals: French Oak Heavy Toast	
OISFH	treats 6 gal..... \$16.05

Working with Barrel Alternatives

The earlier the better when adding oak granules or chips to your wine, however you can add either at almost any time. Once added, the oak takes a good 6 months to integrate with the wine; a year if you use heavy toast. Add early so that it will be ready to drink 6-12 months after oaking, if you are planning to bottle within this timeframe.

Barrel Accessories

Mildewcide Coating- Clear

O'Sullivan X650 is a combination of emulsified acrylic resins and oxidizing oils, plus agents to control mildew, wood borers and other organisms on wood containers, while at the same time allowing them to breathe. It is milky green, but dries to a clear satin finish.

Two coats, applied 24 hours apart is recommended. If applied to used barrels, clean the outside of the barrel with soda ash and hot water, then apply a non-chlorinated sterilizer to kill any mold and to brighten the wood. Coverage is about 200 sq ft per gallon. Do not apply when temperature is below 60°F.



X650-23	16 oz..... \$7.50
X650-GAL	1 gallon..... \$48.30

Barrel Bungs

100% food grade silicone to give a secure, airtight seal. Drilled SKU has 3/8" hole.

These items are pictured on page 25.

SB11S	solid barrel bung..... \$6.20
SB11B	drilled barrel bung..... \$6.20

Sulfur Pastilles (drip less) Discs



Preferred replacement for sulfur strips. When burned in a closed barrel, it is filled with SO₂

to inhibit mold or bacterial spoilage. A sulfur disc holder, which is a stainless steel basket with a wire tether, is the recommended safe way to burn a sulfur pastille in a barrel.



SD	5 gm sulfur pastille 1 disc.... \$0.49
SH	Sulfur Disc Holder..... \$9.79

Preserving Barrels

There is no need to treat new barrels with sulfur pastilles, as new barrels are protected by high tannin levels and will actually be more likely to leak if treated. Once wine has been made in a barrel, it is critical to prevent conditions which will encourage mold or bacterial growth. Always use your nose when examining a barrel; off odors rather than a clean oak smell indicate a problem. The use of a sulfur pastille will not restore a barrel that has gone bad and such barrels should not be used for wine.

A simple and safe way to burn a sulfur pastille in a barrel is to place one in a sulfur disc holder, light it and lower it into the barrel, keeping it from touching the bottom. Insert a solid bung to hold the unit in place and seal the barrel. After 60 days, carefully remove the pastille to avoid ash spilling into the barrel and burn a new one. Repeat this process as long as the barrel will remain empty.

Analysis and Testing

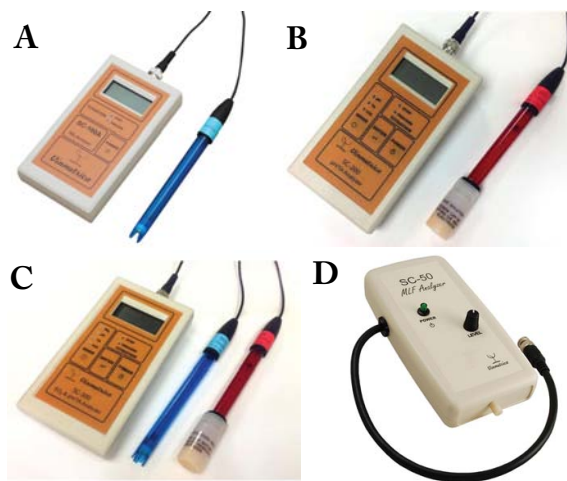
Vinmetrica Analyzers and Refill Kits

Vinmetrica Analyzers are simple to use and remarkably accurate, leaving you time to focus on what matters most -making outstanding wine.

With our Vinmetrica analyzers, you can test a wine sample in less than 5 minutes, cost effectively. The **SC-100** tests SO₂, **SC-200** will test pH/TA, and the **SC-300** will test all three: SO₂, pH/TA. Add an additional analyzer, the **SC-50**, to either the SC-100 or SC-300 and you can test the malo-lactic fermentation (MLF) progress.

Vinmetrica Analyzers

A. Sulfite (SO ₂) Analyzer w/reagents (50 tests)	
SC-100	\$245.00
B. pH/TA Analyzer w/reagents (30 tests)	
SC-200	\$173.00
C. SO ₂ , pH/TA Analyzer w/reagents (50 sulfite & 30 TA tests)	
SC-300	\$352.00
D. MLF Analyzer. Works with SC-100 or SC-300 (5 tests)	
SC-50	\$119.00



Accessories and Refills

Don't forget to purchase the **deluxe lab accessory kit** and **refills**. Shelf life on reagents is 6 months. **SC-50R** is the refill for SC-50; to maximize shelf life, please freeze Biopressure Reaction vials and 1M Malic Acid solution upon receipt. Boost Juice should be kept in the refrigerator to maintain its effectiveness.

E. Deluxe Lab Accessory Kit

Includes burette stand, magnetic stirrer, 10mL glass Burette w/Teflon stopcock, electrode holder & double burette clamp. Ideal companion for an analyzer.

SC-KIT..... **\$115.00**

Analyzer Refills

F. Reagent refill for pH/TA, for the SC-200 or SC-300 (30 tests)

SC-200R..... **\$35.00**

G. Reagent refill for SO₂ for the SC-100 and SC-300 (50 tests)

VSO2-R..... **\$37.00**

H. Reagent & reaction vial combo kit refill for SC-50 (16 tests)

SC-50R..... **\$50.00**



Accuvin Testing Kits



Accuvin Quick tests are individually packaged and contain all materials for 10 tests, with the exception of the sugar test kit, which has 5 tests. Follow the easy, illustrated instructions, and compare the color of test strip or test tube with the color chart to obtain results.

I. QTFSO2	Free SO ₂ test, 10 tests.....	\$36.14
J. QTPH	pH test, 10 tests.....	\$27.44
K. QTRS	Residual sugar test, 5 tests.....	\$32.70
L. QTTA	Titrateable acidity, 10 tests.....	\$23.94
M. QTMA	Malic acid test, 10 tests.....	\$38.84
N. QTLA	L-Lactic acid test, 10 tests.....	\$22.23

Hanna Instruments and Products

Hanna model HI2020 edge® pH kit



Thin and light-weight, measuring just 1/2" thick and weighing less than 9 ounces. Edge has an incredibly wide viewing angle, 5.5" LCD and a sensitive capacitive touch keypad. With the

purchase of additional electrodes, the edge can measure conductivity and dissolved oxygen through its unique digital electrodes. These digital electrodes are auto-recognized. Providing sensor type, calibration data and serial number when connected to edge with an easy to plug-in 3.5mm connector. Edge's versatile design is equally at home in your hand, on a lab bench, or mounted on a wall. It simplifies measurement, configuration, calibration, diagnostics, logging and transferring data to a computer or a USB drive. Edge features Hanna's exclusive CAL-CHECK® to warn you if the pH electrode you are using is not clean or if your buffers are contaminated during calibration. They have also added SENSOR-CHECK for sensors with matching pin- now it warns you if the pH bulb is cracked or if the junction of the electrode is clogged.

HI2020.....\$399.00

Additional probes available for the HI2020, please see our [website](#) or call us for more details.

Hanna Portable pH/ATC Meter



This meter is waterproof and has a dual level LCD that displays pH, and °C and °F. At start up it performs a self check & displays the remaining battery life. This meter features a stability indicator

and hold feature to prompt the user when to take the reading, and freeze the display for accurate recording. It has a stainless steel temperature probe for quick measurement, and an auto-compensation. This meter has a 1 or 2 point calibration and is accurate to +/- 1°F. Comes complete with batteries.

Electrode replacement PHEPE available for sale.

Portable pH meter

PHEP5.....\$117.55

Replacement Electrode for PHEP5

PHEPE.....\$68.00



Hanna Model HI208 pH Meter



This pH meter has a built in magnetic stirrer, is compact and lightweight (14.8 oz). It also features dual temperature scales, a battery or 12 VDC, automatic calibration, pH and temperature

in one probe, and the rugged built in beaker and beaker top electrode holder. These features and more are sure to meet the needs of a busy environment or classroom setting. Accuracy +/- 0.02 pH, and automatic calibration 1 or 2 points with 4.01, 7.01 or 10.01 buffers. HI208.....\$270.00

KCL-22 Potassium Chloride saturated solution, Electrode storage solution.....\$4.99

Hanna Reagents, Standards & Replacement Parts

We handle many Hanna products, so if you do not see the product listed here or on our website, please contact us. We stock or carry most of the 84100-XX and 84102-XX refill products. If you have the MTSO2 with tubing; reagent refills are going to be discontinued in the near future.

The new HI84500 - MTSO2 was redesigned with a plunger style pump, and the new reagents are slightly different, 84500 or 84502 series.

MTSO2 Sulfur Dioxide Mini Titrator.....\$610.00



Sugar Testing

Knowing your wines' residual sugar level is an important part of winemaking. Dry wines should contain 0.2%, or 2 g/L or less of residual sugar to be considered stable. Sweeter wines with higher sugar levels need to be properly stabilized before bottling to prevent secondary fermentation in bottle.

Clinitest Residual Sugar Test

Measures up to 5% residual with reasonable accuracy. The kit includes one bottle of 36 tablets with the Clinitest color chart, test tube and dropper. The **refill (SGR)** includes the bottle of 36 tablets and the Clinitest color chart. Sucrose (cane sugar) will not show with this test until it has inverted to glucose and fructose. It inverts naturally in acidic solutions such as wine but may take several days. If you test immediately after adding cane sugar the added sugar will not be measured by this test.

SGT Clinitest Residual Sugar Test Kit.....\$22.98

SGR Refill Clinitest Sugar Tablets.....\$21.06

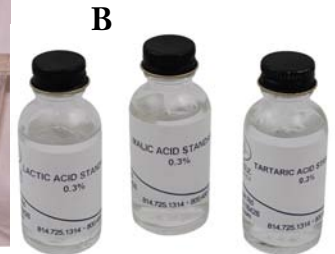


Analysis and Testing

Vertical Paper Chromatography

Monitoring the progress of Malo-Lactic Fermentation (MLF) in your wine is an important parameter that is often overlooked. Paper Chromatography, used alongside visual signs of fermentation, is an effective way to help identify potential MLF problems early, so that they can be resolved.

Vertical Paper Chromatography kits typically take 24 hours to show results. These tests use a butanol-formic acid solvent with a bromocresol green indicator to pick up a dried wine sample on a sheet of chromatography paper. As the solvent advances over the paper, each acid in the sample is deposited at a point that is a specific percent of the total distance traveled by the solvent. Comparing the acid spots from the sample to a standard identifies which acids are present, indicating the progression of the malo-lactic fermentation. The kit includes a solvent developer, paper, micropipettes, acid standards and all necessary tools and directions. Replacement parts and accessories are available.



A. Vertical Paper Chromatography Kit		
PCKV.....		\$55.60
B. Acid Standards		
AC3	PCKV Refill: Lactic, Malic, Tartaric.....	\$4.35
ACLA	Lactic 1 oz bottle.....	\$1.80
ACMA	Malic 1 oz bottle.....	\$1.80
ACTA	Tartaric 1 oz bottle.....	\$1.80
Solvents, Paper and Accessories		
C. SD250	Solvent developer 250mL.....	\$12.95
D. MP100	Capillary pipettes 100/vial.....	\$5.40
E. CP30V	Chromatography vertical paper 30 sheets.....	\$30.25
F. PCK-CLIPS	Clips for paper, two.....	\$1.50

Acid, pH Testing and Accessories

Next to testing for sugar content, the most important measurements in winemaking are for total acidity (TA) and pH. Wines outside 0.5% to 0.9% TA can seem flat and insipid or uncomfortably sharp. pH above 3.6 can be unhealthy for your wine. The following products can assist in ensuring your total acidity is at a desirable level. pH is best tested with a pH meter or Accuvin test (see pages 28-29).



Acid Testing Kits

Acid testing should be an essential practice for any winemaker. We carry basic to more advanced testing kits to fit your needs.

SACK	Syringe acid test kit.....	\$8.99
DACK	Deluxe acid test kit w/ metal stands (pictured).....	\$131.00
AACK	Acid test kit with 10mL self leveling acrylic burette.....	\$147.00

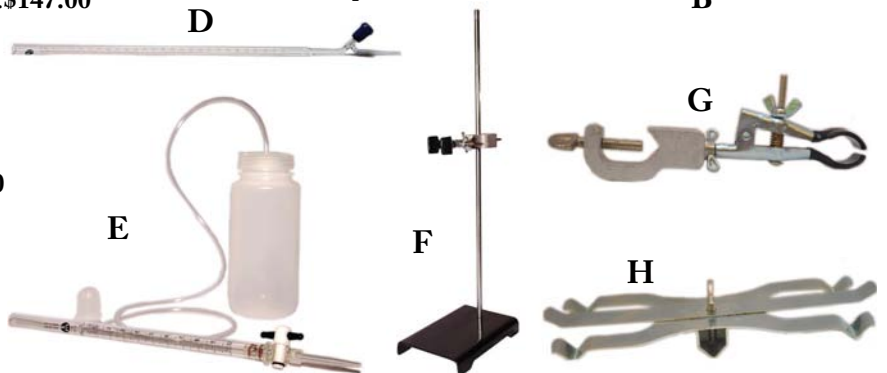
Burettes and Accessories

Burettes are used primarily for titration, to transfer a solution precisely.

D. B25T	25mL glass burette w/ Teflon stopcock...	\$21.96
E. B10SL	10mL self-leveling acrylic burette.....	\$104.10
F. MBS	Metal burette stand with 18" rod (clamp not included).....	\$11.40
G. CLAMP-AACK	Burette clamp for AACK.....	\$11.75
H. MBC	Double burette clamp.....	\$13.90
FBUR	Burette funnel: 28mm top, 6mm outside stem (pictured on page 22).....	\$3.25

Indicator Solutions

A. Sodium Hydroxide, 0.1N, 16 oz.	
NAOH-23.....	\$9.50
B. Potassium Acid Phthalate, N/10 solution, 4oz	
KAPH-22.....	\$10.24
C. Phenolphthalein, 1% in 70% alcohol, 1oz	
PHEN-21 1 oz.....	\$2.90
PHEN-23 16 oz (pictured).....	\$10.00



Acid, pH Testing and Accessories (continued)

Pipette Filler Bulb, Universal
PFBU.....\$18.80



Pipette Filler Pumps
PF10 10mL.....\$10.40
PF25 25mL.....\$10.93

Free SO₂ Testing

Aeration Oxidation Apparatus (AOF)

This Free SO₂ Testing Kit includes: stand, double clamp, nalgene aspirator, flow meter, tubing & clamps, quick disconnects, 2 piece impinger unit, 100ml round bottom double neck flask, bubbler/stopper, stopper w/glass hose connector, aspirator faucet adaptor(s), and instructions. Reagents and accessories are available separately.



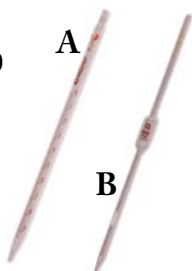
AOF.....\$326.00

Required Equipment for AOF

To use, you will need the following: sodium hydroxide 0.01N (NAOH-23, make a 1:9 dilution), hydrogen peroxide, phosphoric acid 25% (PHOS-250), distilled water, SO₂ indicator solution (SO2I-21), two 10mL pipettes, and one 20mL pipette.

Pipettes

- A. Serological, 10 mL
SP10.....\$6.50
B. Volumetric, 20 mL
VP20.....\$13.99



- C. Sodium Hydroxide, 0.1N 16 oz bottle
NAOH-23.....\$9.50
D. Phosphoric Acid 25%, 250mL bottle
PHOS-250.....\$6.60
E. SO₂ Indicator Solution
SO2I-21.....\$2.30



AOF Replacement Parts and Other Labware

This labware will be helpful when using AOF, but are not required.

- F. Flow Meter: 1.5 – 4 L per minute
FLM.....\$77.95
G. Nalgene Aspirator: sink adapter
NASPSA.....\$32.65
H. Impinger Unit and Parts (30 mL)
IMPUC complete unit.....\$67.84
TIMP replacement top only....\$54.17
BIMP replacement bottom only...\$29.96
I. Double Neck Round Bottom Flask, 100mL
DNF100\$74.63
J. Plastic Rinse Bottle with Spout
RBS.....\$8.14
K. Pasteur Pipette, disposable 5 3/4"
PP.....\$0.27



Free SO₂ test titrettes (SO2K)

Chemetrics, 10-100 ppm range. This is a 'ripper' test where the sulfite is titrated with an iodide-iodate titrant in acid solution using a starch indicator. The test is rapid, simple and the reagents are stable. Accuracy is 2-10 ppm; this test is not recommended for red wine. Each kit contains 10 tests.
SO2K.....\$13.32



Reagents for Ripper SO₂

Tests with your own lab equipment.

- L. Iodine solution, N/10 16 oz
IODINE-23.....\$23.37
M. Starch solution 1%, 16 oz
STARCH-23.....\$11.25
N. Sodium thiosulfate, 0.02N 16 oz
NAHTS-23.....\$5.80
O. Sodium hydroxide, 10% solution 16 oz
NAOH10-23.....\$5.00
P. Sulfuric acid, 25% solution 250mL
H2SO4.....\$6.40



Sulflyser

Made by Dujardin-Salleron, this is an easy, quick and accurate way to measure free and total SO₂ levels in wine and is adapted to highly colored red wines. Results are available in 30-35 seconds. This operates on the principles similar to the ripper test.

SULFI.....\$1,898.00



Analysis and Testing

Alcohol Testing

Ebulliometer (Dujardin-Salleron Model #360)

This product will provide one of the easiest methods of determining the alcohol content in wine. The test is based on the difference in boiling points of water and wine, and the ebulliometer provides a very accurate measure of these factors. Distillation methods are slightly more accurate, but require more time. Available with an alcohol lamp which uses either denatured alcohol or methanol *or* with an electric heater **EBUL-EL2**. Replacement parts available, please inquire.

Ebulliometer, alcohol lamp (pictured)
EBUL..... \$864.17

Ebulliometer, electric
EBUL-EL2.....\$2,535.00



Replacement parts also available. Please see our [website](#) or call us for details.

Hydrometers

Hydrometers

These tools measure the sugar content and potential alcohol of juice. Every winemaker should own the triple scale and a good selection of the narrow range as well. All hydrometers require a hydrometer jar for flotation (see page 33 for our selection of hydrometer jars).

- H1141 Triple scale hydrometer, 0-35 Brix Potential alc, and SG..... \$ 5.25
- H1144 Narrow range 0-8 Brix, 0.1° graduations..... \$ 14.20
- H1145 Narrow range 8-16 Brix, 0.1° graduations..... \$ 14.20
- H1146 Narrow range 16-24 Brix, 0.1° graduations..... \$ 14.20
- H1147 Narrow range -5 to +5 Brix, 0.1° graduations..... \$ 19.67
- H1148 Narrow range specific gravity 0.98 – 1.02..... \$ 14.20



Triple Scale Hydrometer



Narrow Range Hydrometer Style

Precision Hydrometers

Alcohol content of the wine **cannot** be measured accurately with a hydrometer, however the **H1157** will give reasonable readings in high alcohol (60%+) liquids without distilling. The other hydrometers will measure alcohol in samples distilled from wine. These precision hydrometers work best with the larger glass 250mL hydrometer jar **HJ250** (see page 33).

- H1152 Narrow range, 0-5% alcohol, 0.1° graduations..... \$ 25.99
- H1153 Narrow range, 5-10% alcohol, 0.1° graduations..... \$ 25.99
- H1154 Narrow range, 10-15% alcohol, 0.1° graduations..... \$ 25.99
- H1157 Proof and Tralle, 0-200 proof (0-100 % alcohol by vol)..... \$ 9.16



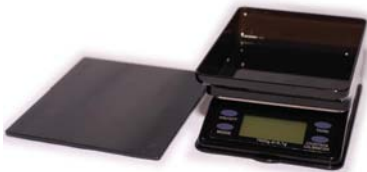
Narrow Range Precision Hydrometer Style

Scales

Digital Portion Control Scale

This scale has 1 KG capacity, and can weigh up to 1000 grams in 0.1 gram increments.

It also has five additional modes. 5 year warranty included.



PCS 1 kg digital scale..... \$19.25

Digital Scale

This scale has a 2KG capacity and can measure in 0.1 gram increments. It is battery operated and uses 2 AAA batteries (not included).



PCS2 2 kg digital scale..... \$27.31

Digital Pocket Scale

This pocket scale has a capacity of 100 grams, and measures in 0.01 gram increments—perfect when you need a more exact measurement.



PCS3 100 gm digital scale..... \$12.99

Glassware

Volumetric Pipettes

VP5	5 mL.....	\$6.85
VP10	10 mL.....	\$7.35
VP15	15 mL.....	\$10.85
VP20	20 mL.....	\$13.99
VP25	25 mL.....	\$15.19
VP50	50 mL.....	\$22.49



Volumetric Pipette

Serological Pipettes

SP2	2 mL.....	\$8.25
SP5	5 mL.....	\$6.90
SP10	10 mL.....	\$6.50



Serological Pipette

Pasteur pipette disposable, 5.75"

PP.....		\$0.27
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Disposable Pasteur Pipette

Labware Racks and Holders

A. LWT	Lab ware tower.....	\$16.59
B. LWH	Lab ware holder.....	\$5.84
C. LWR	Lab ware rack.....	\$7.21

Hydrometer Jars

D. Plastic 38 x 350		
HJP.....		\$4.07
E. Glass		
HJ100	Glass 100mL.....	\$14.30
HJ250	Glass 250mL.....	\$22.59
HJ500	Glass 500mL.....	\$29.93
HJ1000	Glass 1000mL.....	\$40.17

F. Erlenmeyer Flask

EF250	250mL.....	\$4.06
EF500	500mL.....	\$7.22
EF1000	1000mL.....	\$10.87

G. Volumetric Flask

VF250	250 mL.....	\$8.60
VF500	500 mL.....	\$13.20

Volumetric Flask 750mL

Minute graduations between 680 & 750mL		
VF750	750 mL.....	\$180.00

H. Glass Beaker

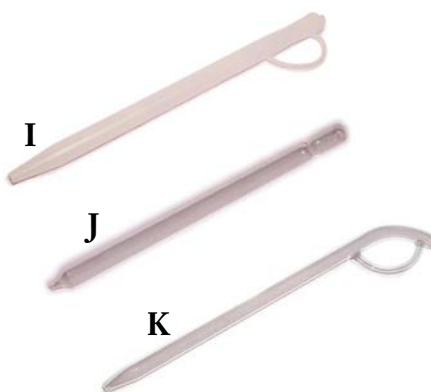
BEAK150	150mL.....	\$2.95
BEAK250	250mL.....	\$3.70
BEAK600	600mL.....	\$7.25



Wine Thieves

A **wine thief** is used to remove a small amount of wine from a cask, carboy, or other container for testing or tasting. Our Pyrex Glass Wine Thief (PGWT), produced by Dujardin-Salleron in France, is an excellent thief for use with barrels, and will add elegance and class to your cellar. Our basic glass version (WTL) measures 12-1/4" x 3/4". Our more affordable plastic version (WTP) consists of three pieces that make the thief 19" long x 1" diameter.

I. WTP	Plastic, 3 piece wine thief.....	\$5.92
J. WTL	Glass, 12" wine thief.....	\$7.60
K. PGWT	Pyrex Glass wine thief.....	\$54.78



You May Also Need:

Analysis and Testing Supplies Pages 28-32

Labware is often used in testing the various chemical components in wine, such as SO₂, pH, or titrable acidity (TA). We offer various Analysis and Testing Supplies to make the winemaking process easier.



Filtering and Clarifying

Clarifying your wine can be accomplished through fining, filtration, or a combination of both. Filtration is a mechanical method where the wine is pumped across a filter medium that screens and catches impurities. This is a very efficient and highly effective, but also more expensive, method that can produce wines of striking clarity and brilliance. Fining is a chemical method using clarifying agents that chemically attract and settle out suspended particles through various mechanisms. It produces acceptable clarity but not to the same level filtration can.

Filter Pumps and Housings with Refill Cartridges and Pads

Buon Vino Mini-Jet and Super-Jet

These products are small plate and frame units that accept their own special filter pads, which are also available for purchase. The Mini-Jet is good for 5-10 gallons and the Super-Jet is for 15-20 gallons. These products leak a bit, which is typical for plate and frame.



The Super-Jet

Buon Vino Mini-Jet and Filter Pads

BVMJ	Mini Jet Filter Unit.....	\$ 237.00
BVMJPADF	Filter pads #1 Fine.....	\$4.15/3pk
BVMJPADM	Filter pads #2 Medium.....	\$3.40/3pk
BVMJPADC	Filter pads #3 Coarse.....	\$3.40/3pk

Buon Vino Super-Jet and Filter Pads

BVSJ	Super Jet Filter Unit.....	\$522.50
BVSJF1	Filter pads #1.....	\$5.15/3pk
BVSJF2	Filter pads #2.....	\$5.15/3pk
BVSJF3	Filter pads #3.....	\$6.30/3pk



Buon Vino Mini Jet Filter Pad



Buon Vino Super Jet Filter Pad

PIWC Brand Units

These units are commercial quality and have been assembled and sold for over 45 years. Different configurations are available, but they all use the cartridge type media. These units are rugged, cost effective, and suitable for operations producing small amounts and up to 10-15 thousand gallons per year, with typical batches being around 500 gallons or less. A PIWC unit consists of a positive displacement self priming pump with either an internal or external prescreen (never run a pump without the screen in place), carbonator motor, cartridge housing, stand, 10 feet of hose, and connectors. They are ready to use as soon as a cartridge is inserted and prepped.



PIWC 10" Cartridge Type Housings

Available in plastic or stainless steel with a 100gph pump in either brass or stainless steel. Comes with 10 ft of 5/8" tubing. Be sure to order more at time of purchase if needed.

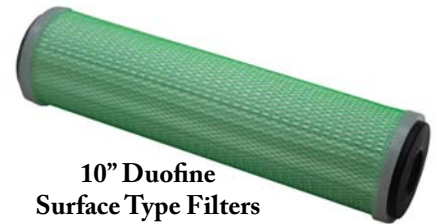
WF1A	Plastic unit, 100gph brass pump filter unit.....	\$397.00
WF1SB	Stainless steel filter housing, 100gph brass pump.....	\$597.00
WF1SS	Stainless Steel, 100gph SS pump.....	\$697.00
ST12	12" PVC Storage tube for cartridges.....	\$18.99

Compatible 10" Cartridge Filters

		<i>Typical throughput</i>
CM10	Claris DOE depth type, coarse.....	\$5.87 40-60 gal
CF10	Claris DOE depth type, fine.....	\$5.86 90-140 gal
DF10-1	Duofine 1micron surface type.....	\$40.58 150-400 gal
DF10-.45	Duofine 0.45 micron surface type.....	\$42.49 90-400 gal
DF10-.2	Duofine 0.2 micron surface type.....	\$47.38 70-350 gal
VFA10-.45DOE	Membrane DOE, Absolute.....	\$103.99 variable



10" Claris Foam Depth Type Filters



10" Duofine Surface Type Filters

Filter Pumps and Housings with Refill Cartridges and Pads

PIWC 20" Cartridge Type Housings

Available in stainless steel only. This unit can be built with a 100gph or 240gph stainless steel pump. The standard unit has threaded fittings, or we can custom build with tri-clamp fittings. Comes with 10 feet of 5/8" tubing- be sure to order more if needed.

WF2SS	20" SS housing with 100gph SS pump.....	\$795.00
WF240S2	20" SS housing with 240gph SS pump.....	\$923.00
ST24	24" PVC Storage tube for cartridges.....	\$22.60

Compatible 20" Cartridge Filters

		<i>Typical throughput</i>
CM20	Claris DOE depth type, coarse.....	\$11.66 90-140 gal
CF20	Claris DOE depth type, fine.....	\$11.26 70-120 gal
DF20-1	Duofine 1micron surface type.....	\$78.99 250-900 gal
DF20-.45	Duofine 0.45 micron surface type.....	\$84.85 200-800 gal
DF20-.2	Duofine 0.2 micron surface type.....	\$95.25 150-700 gal
VFA20-.45DOE	Membrane DOE, absolute.....	\$202.99 variable



20" Claris Foam
Depth Type Filters



20" Duofine
Surface Type Filters

We also have a variety of filter parts and accessories available on our [website](#), or call for pricing and availability.

To Clean and Store Filter Cartridges

Once you are finished filtering, run fresh, clean water through your filtering system to rinse the wine out of the filter housing, filter cartridge and hoses. Do not back flush the filter cartridges.

Remove the O-rings on the filter cartridge and place cartridge in storage tube. Store the O-rings in a safe, dry place. (We do not have extra O-rings- so don't lose them.)

You can store the rinsed filter cartridges in either a minimum 40% alcohol solution (for example, Vodka), or you can mix a storage solution. In a gallon of water add 2 teaspoons of Potassium Metabisulfite and 1 tablespoon of Citric Acid. Mix well. (Do not use Denatured Alcohol)

Place the filter cartridges in the storage tube and fill the tube with the storage solution of your choice, fully immersing the cartridges. We stock storage tubes for both the 10" and 20" filter cartridges.

Fining Wine with Additives

If you have a wine that is not clear, a fining agent should be used before filtration. We carry a variety of fining agents (see pages 14-15) to solve most clarifying problems.

Once the wine is clear, filtration is the next step to a brilliantly clear wine.

If you need further guidance with the use of these filtering and clarifying agents, see the "Filtering and Clarifying" section on the *Winemaking 101* page of our website:

piwine.com/winemaking-101.html

If you would rather use additives to clarify your wine, see page 14 for a list of agents that we carry.



12" Cartridge
Storage Tube
ST12



24" Cartridge
Storage Tube

Bottling and Corking










Once you have completed fermenting, aging, and clarifying your wine and it is ready to drink, you need to enjoy the fruits of your labor and free up your carboy for your next batch of wine. Presque Isle Wine Cellars carries a wide variety of bottles, corks, wine closures, and corkers that will assist you in easily bottling your wine for your and your family's and friends' enjoyment.

Bottles

The three most common shaped bottles are Bordeaux (short neck) **W5CG**, burgundy (sloped shoulders) **WP137** and the stretch **W17** or California hock **W82** (neck elongated, making bottle slimmer than burgundy) bottles. Most are available in green or clear (flint).

SKU	Description	Price / case
W5CG	Bordeaux, 750mL cork finish green 12/cs.....	\$10.75
W5CF	Bordeaux, 750mL cork finish flint 12/cs.....	\$10.75
W375CG	Bordeaux, 375mL cork finish green 24/cs.....	\$19.80
W375CF	Bordeaux, 375mL cork finish flint 24/cs.....	\$19.80
WP65	Punted Bordeaux, 750mL cork finish DLG 12/cs.....	\$13.23
WP137	Punted Burgundy, 750mL cork finish DLG 12/cs.....	\$13.05
W187G	Petite burgundy 187mL crown cap green 24/cs.....	\$21.70
W187F	Petite burgundy 187mL crown cap flint 24/cs.....	\$20.91
W82BLUE	California hock, 750mL, cork finish blue 12cs.....	\$15.48
W13F	Stretch hock, 750mL, cork finish flint 12/cs.....	\$16.75

See our [website](#) for our full and updated line of wine bottles.

Bottle Shape	Bordeaux 	Burgundy 	Hock 
Color	Green 	Flint 	Blue 
Size	187 mL 	375 mL 	750 mL 

Corks and Wine Closures

Natural corks should typically be used but plastic top corks, synthetic corks, or screw tops (with compatible bottles) can be used as wine bottle closures for wines which will be consumed within one year. You will need a **corker** to insert corks (see page 37). Our

corks are sold in bags of 25, 100, 500, and 1000, and a box of 5000.



Agglomerated Corks (AGCK)


Agglomerated Corks, 1.75" (AGCK) (pictured above)

Bag of 25.....	\$3.75
Bag of 100.....	\$15.00
Bag of 500.....	\$60.00
Bag of 1000.....	\$115.00
Box of 5000.....	\$550.00

Plastic Top Corks: natural cork (CWT)

 Bag of 25.....	\$8.75
Bag of 100.....	\$27.22
Bag of 500.....	\$122.30
Bag of 1000.....	\$229.40
Box of 5000.....	\$962.50


Plastic Top Corks: synthetic cork (TTOP)

 Bag of 25.....	\$7.96
Bag of 100.....	\$26.37
Bag of 500.....	\$123.05
Bag of 1000.....	\$227.90
Bag of 5000.....	\$971.50


Colmated Cork, 9 x 1 3/4" (CMCK)

 Bag of 25.....	\$8.00
Bag of 100.....	\$29.44
Bag of 500.....	\$144.00
Bag of 1000.....	\$256.00
Box of 5000.....	\$1,120.00


Agglomerated 1+1 cork 9 x 1 3/4" (COTAT)

 Bag of 25.....	\$7.25
Bag of 100.....	\$24.65
Bag of 500.....	\$116.00
Bag of 1000.....	\$217.50
Box of 5000.....	\$1,015.00


Synthetic Noma Cork 9 x 1 3/4" (SNCK-NOMA)

 Bag of 25.....	\$8.00
Bag of 100.....	\$27.20
Bag of 500.....	\$128.00
Bag of 1000.....	\$240.00
Box of 5000.....	\$1,120.00

Scott cork 9 x 1 1/2" (COPR-SCOTT)

 Bag of 25.....	\$15.00
Bag of 100.....	\$51.00
Bag of 500.....	\$240.00
Bag of 1000.....	\$450.00
Box of 5000.....	\$2,100.00

Scott cork 9 x 1 3/4" (COPR2-SCOTT)

 Bag of 25.....	\$22.25
Bag of 100.....	\$75.65
Bag of 500.....	\$356.00
Bag of 1000.....	\$667.50
Box of 5000.....	\$2,892.50

Don't see what you're looking for? Visit our website at piwine.com/bottle-closures.html for our full line of bottle closures.

Corkers

When it comes time to cork your bottles of freshly made wine, you will be pleased that you invested in one of our corker models. The hand corker will work with the **CMCK** corks, but you will be a happier corker if you spend a few more dollars on a floor model, which you can use to insert just about any type of cork with much greater ease. If you are making more than 10 to 15 gallons per year, you should strongly consider using a floor model corker.

Hand Corker

This hand model lever corker is relatively easy to use and trouble free. The cork is compressed with the double handles and driven in with the top lever. This model is adequate for small batches.



LC4..... \$34.00

Portuguese Style Floor Model Corker

This corker will beautifully cork your bottles of wine with minimal effort, and quickly. Made in Italy, this corker is suitable for small wineries and serious amateurs. It can handle about 400 bottles per hour. Cork depth is adjustable.



PCO.....\$62.90

Italian Floor Model Corker

Similar to the Portuguese model (PCO), the compression head is brass and it stands 3" higher at 35". Its advantage over the Portuguese model is that it can be used to compress the large corks used with the 3 liter and larger wine bottles.



ITCO.....\$135.50

Rapid Floor Corker

With a long action arm, corking will be a smooth, easy process with this unit. Equipped with four brass jaws, it will compress corks 22-27mm in width, and 33-48 mm in length, down to 16 mm. This unit fills the gap between less expensive corks and a semi-automatic corker. It is rugged, easy to work on, and clean.



RCO. Call for Availability & Pricing

Plastic Heat Shrink Capsules and Heat Tunnels

Plastic Heat-Shrink Capsules add an attractive tamper-evident finish to a bottle, but do not provide a barrier to air or keep mold from growing on the cork. Select available designs and prices can be viewed at right.

The best application method is using a heat tunnel to shrink them down smoothly around the neck. The bench model horizontal sliding tunnel (**SHT**) or hand held heat tunnel (**IHHT**) are good options. The 220V commercial model (**HT**) is good for small wineries and can do about 800 bottles per hour.

- SHT** Horizontal heat tunnel..... \$229.25
- IHHT** Hand Held heat tunnel..... \$390.00
- HTS** Heat Tunnel Stand for IHHT..... \$46.00
- HT** Bench Model 'Tosa'..... *Special Order- Call for Availability*



Horizontal Heat Tunnel



Hand Held Heat Tunnel



Heat Tunnel Stand



Bench Model 'Tosa'
Special Order-Please Call

	Black CAP6BK \$5.55 (100) \$51.40 (1000)		Green CAP6GR \$5.55 (100) \$51.40 (1000)
	Black w/ Stripe CAP6BKS \$5.55 (100) \$51.40 (1000)		Violet CAP6V \$5.55 (100) \$51.40 (1000)
	Gold CAP6GO \$5.55 (100) \$51.40 (1000)		Maroon Matte CAP6R \$5.55 (100) \$51.40 (1000)
	Silver CAP6S \$5.55 (100) \$51.40 (1000)		Ciano Blue CAP6BLUE \$5.55 (100) \$51.40 (1000)
	White CAP6W \$5.55 (100) \$51.40 (1000)		Bright Red Shiny CAP6RR \$5.55 (100) \$51.40 (1000)

Cleaning and Sanitizing

Clean and sanitized tools and equipment are vital in the winemaking process. Anything that may come into contact with the juice or wine needs to be sanitized in order to prevent contamination and possibly ruining the wine.

Cleaning Agents

Soda Ash (Sal Soda)

Sodium carbonate, an unscented and inexpensive alkaline cleaning agent that works as well as most of the more expensive cleaners. Use a ¼ cup per gallon of hot water.



SALS-10 800 gms.....\$4.20
SALS 50 lbs.....\$25.20

B-Brite



An active oxygen in sodium carbonate base cleaning agent- ideal for cleaning barrels. Contains no chlorine or sulfite. Usage is 1 Tbsp per 1 gallon of warm water.

BBT 8 oz tub..... \$2.30
BBT-38 8 lbs.....\$29.50
B-BRITE35 35 lbs.....\$103.20

OneStep

Cleans with oxygen and does not contain chlorine, bisulfate's, organic compounds, or phosphates. Use 1 Tbsp in 1 gallon of warm water. Rinsing is not necessary with One-Step.



ONESTEPA 1 lb..... \$5.00
ONESTEPB 5 lbs.....\$25.70

PBW Professional Brewery Wash



Non-caustic buffered alkaline detergent safe to use on stainless steel, glass, brass, and plastic. Removes tartrate crystals from tanks without the dangers associated with caustic soda. Use 2 oz in 5 gallons of warm water. Easily rinses off surfaces.

PBW-5 1 lb..... \$9.90
PBW-38 8 lbs.....\$58.55

Brushes and Cleaning Accessories

Brushes

A good brush and rinser are usually sufficient for cleaning. Our brushes have nylon bristles and bendable wire handles to ensure you can reach all hard to reach areas. We carry brushes specially made for bottles, carboys, and one gallon jugs.



BBR Bottle brush, 15" long.....\$3.34
CBR Carboy brush, 27" long, brush head 10"..... \$6.00
GJB Gallon jug brush, 21" long...\$5.70

Buon Vino Spray Wand

Four feet of flexible tubing, a plastic tube and spray tip, this spray wand sprays a strong jet of water to make cleaning your equipment easier. Especially helpful for rinsing carboys.



BVSW.....\$14.50

Jet Bottle Rinser

American made. Screws on to your laundry tub faucet or garden hose. Buy the kitchen sink adapter to use this handy rinser in your kitchen sink. Requires only one hand to operate. Flushes the bottle when pressed against the trigger and shuts off when bottle is lifted.



R3 Jet bottle rinser.....\$14.00
R3AD Kitchen sink adapter.....\$7.95

Bottle Sterilizer/Rinser

This product consists of a reservoir for water, or SO₂ solution, and a spring loaded pump. The solution recirculates in the reservoir. Fits on top of the bottle draining racks (pictured below) for easy use and storage.

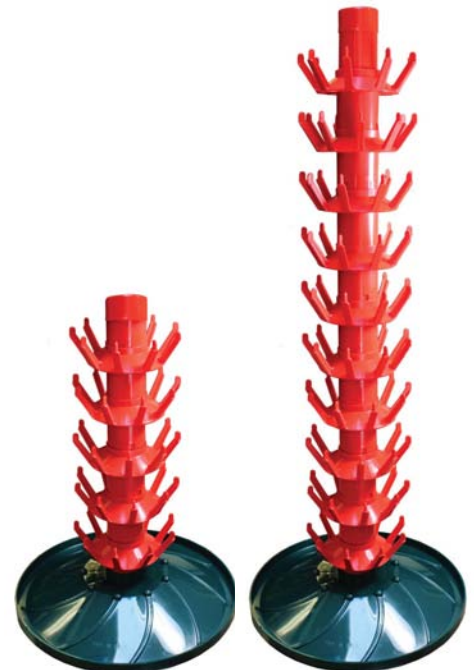


SR3 Bottle sterilizer/rinser.....\$18.25

Bottle draining racks

Available in two sizes: 45 or 90 bottle posts. These bottle draining racks take up very little space, and the SR3 (Bottle sterilizer/rinser) can be mounted on top for ease of use.

DR45 45 bottle draining rack.....\$25.40
DR90 90 bottle draining rack.....\$36.50



45 Bottle Draining Rack

90 Bottle Draining Rack

Champagne Supplies

From champagne bottles to aluminum capsules, we carry everything you need to create beautiful sparkling wine. Interested in but never made sparkling wine before? Contact us and allow us to help.

Champagne Bottles



Lightweight Green

Champagne bottles come in two different weights. The light weight (**W750CHG**) can't withstand more than 2 atmospheres of pressure, and the heavy weight (**W35**) is intended for Méthode Champenoise, and can withstand 10 atmospheres.



Heavyweight Green

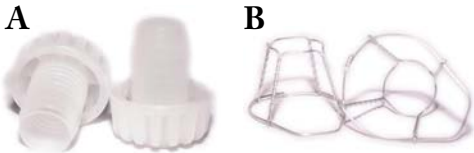
- Lightweight Green, 750mL **W750CHG**..... \$13.16
- Heavyweight Green, 750mL **W35**.....\$25.50

Champagne Closures

We carry various types of closures that can be used to secure sparkling wine within a bottle. From champagne corks, to an easy plastic reusable closure, we are sure you will find a product that fits your needs.

Plastic White Reusable Closure

Can be put in without a tool, but use of a crown capper (**HCC**) or a rubber mallet is recommended. These closures are designed to be held tightly with the wire hood (**WHP**) in order for it to be effective.



- A. **CLCH** Plastic white, 100 corks..... \$15.52
- B. **WHP** Wire hood for plastic closure, 100 wire hoods.....\$ 6.12



Champagne Cork

This cork is a 3 piece #14 closure, and requires a special corker. Use of the wire hood designed to work with corks (**WHC**)

is recommended. This wire hood has a metal disk on top to fit over the cork.



- CKCH** Champagne cork, 100 corks.....\$39.60
- WHC** Wire hood for champagne cork, 100 wire hoods.....\$14.67

Wire Hood Tightener Tool

This is a simple device used to twist/tighten the wire hoods- it is simple and easy to use.



- WHT**.....\$5.66

Crown Caps

Crown caps are suitable for the fermentation in champagne bottles. The 26mm **CRCA** will also fit beer and soft drink bottles.



- CRCA29** are 29mm stainless steel, and will fit European bottles.
- CRCA** 26mm, 100 count.....\$3.87
- CRCA29** SS 29mm, 100 count...\$20.21

Crown Cappers

To put the crown caps on, you will need a crown capper. We have the hand model **HCC** or the bench model **FBC**. (Pictured on page 41)

- HCC** Hand model, 26mm....\$19.80
- FBC** Ferrari bench model... \$37.99

Crown Capper Replacement Parts

Replacement parts for use with our **HCC** and **FBC** crown cappers.

- CC29** 29mm bell for **HCC**.....\$2.50
- FBCCH29** 29 mm replacement head for **FBC**, 29mm..... \$12.35

Bidules

Bidules are small plastic cylindrical items that look like short shell casings. They are put into the champagne bottle under the crown cap during primary fermentation to trap some of the sediment that would normally stick to the bottle when it is disgorged.

The 29mm bidules are used in European bottles.



- BD** 26 mm, 100 count..... \$9.00
- BD29** 29mm, 100 count\$13.50

Champagne Capsules

Champagne capsules are aluminum and easily applied by hand. We recommend using a cotton glove to crimp them on the bottles for your own comfort. Measures 4.5" (34mm x 115mm).

- CAC3G** Gold, 100 count.....\$20.70
- CAC3S** Silver, 100 count.....\$20.70
- CAC3BK** Black, 100 count.....\$20.70
- CAC3M** Maroon, 100 count.....\$20.70



For additional champagne supplies you may require, visit piwine.com/champagne-supplies.html.

Beer Making Supplies

Presque Isle Wine Cellars is now your provider of beer making equipment, supplies, and ingredients so you can enjoy your very own home brewed beer. You've experienced the rewards of wine making, now allow us assist you in crafting your first batch of beer.



Basic Beer Making Equipment Kit

Our Beginner's Basic Beer Brewing Kit contains all the equipment you need to begin crafting your first batch of beer, from the True Brew™ handbook, to the fermenting bucket. This kit is the first step towards tasting your own home brewed beer. Complete your purchase with one of our beer making ingredient kits to begin brewing today.

BKB.....\$67.95

Basic Kit Includes:

- True Brew™ Handbook
- 6.5 Gallon Fermenting Bucket with Lid
- Adhesive Thermometer (for Fermenting Bucket)
- 3-Piece Airlock (for Fermenting Bucket)
- 6.5 Gallon Bottling Bucket with Spigot
- Glass, Triple Scale Hydrometer
- Automatic Pump-style Siphon w/ 5' of flexible tubing.
- 3/8" Dual Function Bottle Filler
- Beer Bottle Brush
- Double Lever Capper
- B-BRITE™ Cleanser 8 oz. Tub

Beer Yeasts



Fermentis SafBrew S-33 Beer Yeast

General purpose, robust, high alcohol tolerant yeast. 11.5 grams.

BY-S33.....\$2.38

Fermentis SafLager W-34/70 Lager Yeast

World famous Weihenstephan lager strain with high sedimentation. 11.5 grams.

BY-W34/70.....\$7.34



Fermentis Saflager S-23 Lager Yeast

German yeast, for production of fruity and estery lagers. 11.5 grams

BY-S23.....\$5.95

Fermentis SafAle S-04 Ale Yeast

English yeast, for production of a large range of ales. 11.5 grams.

BY-S04.....\$3.95



Fermentis SafBrew T-58 Ale Yeast

Specialty yeast selected for its estery and somewhat peppery and spicy flavor development. 11.5 grams.

BY-T58.....\$2.59

Fermentis SafAle US-05 Ale Yeast

Produces well balanced beers with a clean, crisp end palate. 11.5 grams.

BY-US05.....\$3.95



True Brew Ingredient Kits

These kits are an excellent introduction to home brewing. True Brew ingredient kits make 5 gallons of beer, which is equivalent to 2 cases of 12oz beers, and works great with our equipment kit.

All kits include bottle caps, necessary ingredients for your chosen variety, and detailed instructions for brewing.

Amber True Brew Beer Making Kit

Well hopped, smooth & full bodied.

ATBBK.....\$28.95

India Pale Ale (IPA)

Monster hopped. Produces a rich bodied ale with a deep copper color.

IPATBBK.....\$35.95

Pilsner True Brew Beer Kit

Light in color and body, emphasizing hop aroma.

PTBBK.....\$30.95

American Wheat True Brew Beer Kit

45% barley / 55% wheat.

AWTBBK.....\$31.95

Irish Stout True Brew Beer Kit

Full bodied ale, high hops, sweet aftertaste.

ISTBBK.....\$31.95

Nut Brown Ale True Brew Beer Kit

A dark and nutty brew.

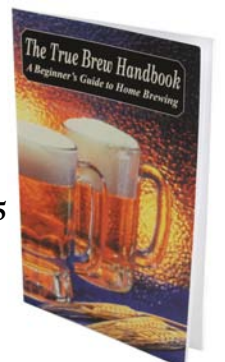
NBATBBK.....\$32.95



Red Ale True Brew Beer Kit

Full bodied, deep and rich in flavor, with glorious red highlights.

RATBBK.....\$33.95



True Brew Handbook

BK-TBH..\$2.95

Beer Bottles and Capping



Amber Beer bottles are available in 12 oz and 22 oz. Bottling day goes much faster when you use the larger 22 oz. amber beer bottles. Perfect for sharing with a friend, presenting as a gift, or taking to a party. These bottles take a standard 26mm cap and fit easily in the door of your

fridge. Easy and quick to cap when you use a bench capper. A 5 gallon batch requires 2 cases of bottles.



Bench Model Crown Capper

- | | | | |
|-------------|--------------------------|---------|-------------|
| B12A | 12oz Amber Beer btl | 24/case | \$12.95 |
| B22A | 22oz Amber Beer btl | 12/case | \$12.95 |
| CRCA | Crown caps, 26mm | | \$3.87/ 100 |
| HCC | Hand crown capper | | \$19.80 |
| FBC | Bench model crown capper | | \$37.99 |



Hand Crown Capper

Other Ingredients

Spray Malt Extract

Derived from barley, malt is a necessary ingredient for fermentation, and is what gives your beer its flavor, color and body. We carry Briess brand.

- | | | | |
|-----------------|----------------------------|-------|----------------|
| SME-BTD1 | traditional dark, 1 lb bag | | \$3.97 |
| SME-BGL3 | golden light, 3 lb bag | | \$10.13 |

Hops

- | | | | |
|---------------|---------------------------|-------|---------------|
| HP-CS | Pellets, Czech Saaz, 1 oz | | \$2.38 |
| HL-CAS | Leaves, US Cascade, 1 oz | | \$2.10 |

Sugar

- | | | | |
|----------------|----------------------------|-------|---------------|
| CANDI-D | Dark Belgian candi sugar | | \$5.99 |
| SUGAR-C | Corn sugar (priming sugar) | | \$2.19 |



Hops Pellets



Hops Leaves



Candi Sugar



Corn Sugar



Spray Malt Extract: Golden Light, 3 lbs

Other Equipment

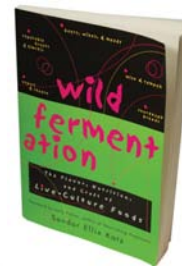
Wort Chiller

This simple to use immersion wort chiller will drop your wort to a proper yeast pitching temperature quickly, to save you time. With a 3/4" female garden hose fitting that will attach to most utility sink faucets, this copper wort chiller is easy to incorporate into the brewing process. Its outlet tube allows the water that has been warmed by hot wort to exit the tube and into your sink, without a mess.



WORTCHILL.....**\$95.95**

Wild Fermentation



Bread. Cheese. Wine. Beer. Coffee. Chocolate. Most people consume fermented foods and drinks every day. For thousands of years, humans have enjoyed the distinctive flavors and nutrition resulting from the transformative power of microscopic bacteria and fungi. Wild Fermentation: is the first cookbook

to widely explore the culinary magic of fermentation. "Fermentation has been an important journey of discovery for me," writes author Sandor Ellix Katz.

BK-WILD.....**\$25.00**

Stock Pots

These stainless steel stock pots will allow you to brew your beer without having to worry about splashing out or boiling over. Easy to clean. The 30 quart (7.5 gallon) pot is the perfect size for brewing a 5 gallon batch of beer.



- | | | | |
|----------------|-------|-------|----------------|
| STOCK30 | 30 qt | | \$74.95 |
| STOCK42 | 42 qt | | \$76.44 |

Nylon Straining Bag

26 x 26 inches.

NSBB.....**\$6.99**



*We are growing and adding products to this category often!
Visit piwine.com/beer-making.html to see our full line of beer making products.*

Food Grade Paints and Coatings

Gondola Enamel

A water soluble, food grade paint with good durability and resistance to acids and caustics. Suitable for presses, crushers, gondolas, ladders, pumps, tank hoops and interior walls. Available in yellow, black, white and red in 500mL or gallon size containers.

500 mL Size



1 Gallon Size



Yellow Enamel

5964Y	500 mL.....	\$ 9.20
5694Y-GAL	1 gallon.....	\$56.45

Black Enamel

5964BK	500 mL.....	\$ 9.20
5694BK-GAL	1 gallon.....	\$56.45

Red Enamel

5964R	500 mL.....	\$ 9.20
5694R-GAL	1 gallon.....	\$56.45

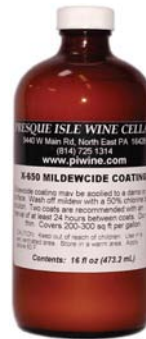
White Enamel

5964W	500 mL.....	\$ 9.20
5964W-GAL	1 gallon.....	\$56.45

Mildewcide Coating

This coating is a combination of emulsified acrylic resins and oxidizing oils, as well as agents to control mildew, wood borers, and other organisms on wood containers-while at the same time allowing them to breathe. It is milky green, but dries to a clear satin finish. Two coats, applied 24 hours apart, are recommended. If applied to used barrels, clean the outside of the barrel with **Soda Ash** (page 38) and hot water, then apply a non-chlorinated sterilizer to kill any mold and to brighten the wood. Coverage is about 200 sq. ft. per gal. Barrels coated with X650 won't stain or discolor. Do not apply when temperature is below 60°F. This is a clear coating, O'Sullivan X650 brand.

16 ounce Size



1 Gallon Size



X650-23	16 oz.....	\$7.50
X650-GAL	1 gallon.....	\$48.30

Clean Before You Paint

Before painting your equipment or coating your barrels with a Mildewcide coating, you want to be sure they are clean. We carry several cleaning solutions that can assist you with this. We suggest using B-Brite and Sals Soda. See page 38 for all of the cleaning and sanitizing products available.



Cleaning Solutions.
Page 38

Grafting Supplies

Chinosol Fungicide Powder

(8-hydroxy quinoline sulfate) This is the best available agent to inhibit Botrytis cinerea infections. Scions may be dipped in a 0.3% solution for up to about 5 hours. The solution may be reused at least three times. It may be used as an 0.1% spray after the grafts have leafed out. A one pound jar contains enough Chinosol to do about 5,000 grafts. It can also be dissolved in the grafting wax listed below to further protect the wax coated grafts from Botrytis infection.



8HQS-10 1 lb..... **\$70.00**
8HQS-38 3 lb..... **\$195.00**

Grape Grafting Wax

Grafting wax is used to provide added mechanical strength to grape grafts and to protect them from desiccation. It will also provide fungicidal protection if Chinosol Fungicide is dissolved in it. To use, heat the wax over an electric hot plate, or double boiler if over gas, to about 158°F (65°C), but in no case allow temperature to exceed 185°F (80°C). Do not heat over an open flame. Dip the graft into the wax far enough to cover the union, and then dip in cold water. If one



year old, grafts are to be coated with wax prior to planting. One pound is enough for about 250 to 300 grafts. Sold by the pound.

GGW 1 lb..... **\$6.00**

Hand Refractometers

Westover Hand Refractometer ATC: Measures 0-32 Brix

This instrument may be used as an expensive substitute for a hydrometer, but finds its greatest utility with vineyardists for monitoring ripening in the field. A few berries are an adequate sample for measuring sugar solids.



The models that are appropriate for use with juice cover a sugar range of 0 to 32% sucrose in 0.2% graduations and are available in temperature and non-temperature compensated models. This temperature compensated model will give accurate readings at any temperature, although this is not terribly critical since the difference is only 0.3% at a temperature 10°C above or below the calibrated temperature. This refractometer has about the same accuracy as a hydrometer.

WRF-ATC..... **\$105.00**

Digital Refractometer for Measurement of Sugar in Wine: Measures 0-50 BRX

This unit is rugged, lightweight and waterproof- perfect for measurements in the lab or field. The actual measurement of the refractive index is simple and quick and provides the vintner a standard accepted



method for sugar content analysis. Samples are measured after a simple user calibration with deionized or distilled water. The instrument measures the refractive index of the grape must. With only a small sample size required (as little as 2 metric drops), it displays quick, accurate results in approximately 1.5 seconds. The stainless steel sample well makes it easy to clean and corrosion resistant. These digital refractometers eliminate the uncertainty associated with mechanical refractometers and are ideal for fast, reliable measurements in the field.

96811..... **\$170.00**

Looking for More?

Visit us at www.piwine.com for our full line of winemaking supplies, gift shop items, and bar supplies.

We also offer our award winning Presque Isle Wine Cellars wine for purchase online to our customers over 21 in select states.

Shipping Information

Our philosophy has been the same since 1964 – only charge our customers the carrier's rate plus handling, which is calculated as close to cost as reasonably possible. We aim to get items to our customers as effectively and inexpensively as possible, and we never treat shipping as a sales gimmick or as a profit center for us.

Currently, our primary source for shipments is through FedEx. If you choose to make an order by phone we provide the option of a USPS delivery given the fact that, in some instances, it may cost you less. Online orders can only be shipped via FedEx at this time. Online transit charges are generated through our shipping calculator. Like anything, errors can happen. If you feel as though the shipping cost for your order may be incorrect, please contact us immediately and we will verify it and correct it if necessary. If the calculator significantly under calculates the correct shipping cost, we reserve the right to adjust it, and will reach out to the customer to confirm this prior to shipping the product(s).

FedEx SmartPost is an option we offer for smaller, lighter parcels. It often provides significant savings on shipping costs, but can take several extra days to deliver. Final delivery is made by your local post office.

For special situations, we may suggest and use alternative methods of shipping if mutually agreed upon with the customer. FedEx offers a 3-Day Select, 2-Day Air, and Next Day Air at extra cost. If you prefer your package shipped by mail, USPS offers Express Mail to some areas as either a next day or 2-day service. Please contact us for rates if you require any of these services. Regardless of shipping method, careful effort is put forth to package each order in as few boxes as possible to keep cost to the customer down. There are occasions when an order includes items that cannot be packed together or that require its own individual box for proper protection. When this occurs we will keep the number of necessary packages to a minimum.

The vast majority of our catalog items can be shipped via FedEx or equivalent carriers. There are some exceptions due to size or weight issues, and those items must be delivered via LTL (Truck) Carrier. These items will be identified within the product descriptions. If any part of your order must be delivered by truck, it will typically be cheaper to send the entire order that way. Items identified within the product description can be shipped via FedEx or

equivalent, but at net shipping costs for the specific item. This means that no other items can be packed with this item. A few products will incur a crating charge in addition to the freight cost. This is noted in the product descriptions.

SHIPPING SERVICE OPTIONS

FedEx: Ground service is available to the 48 contiguous states, taking from 1 to 6 work days to reach customer. No package may exceed 150lbs; up to 108" in length and 165" in length plus girth. Insurance is \$100 per package and is included in rates. FedEx offers service to Canada and for a fee will act as a Customs broker. Canadian customers should check with FedEx for rates; a phone number must be included with the order. **Next Day and Second Day Air Service:** These services cover all 50 states and Puerto Rico. Saturday delivery is available with FedEx Next Day Air in most of the USA for an additional fee. **3 Day Service** has some utility especially in the far west.

USPS (Parcel Post): This service reaches all states and territories. Some items such as presses, barrels, and crusher-destemmers cannot be sent this way. Maximum weight is 70 lbs. Each package is charged separately. Rates do not include insurance or tracking information unless it is being shipped priority mail, in which case insurance coverage of \$50 will be applied to the package. If you are not shipping priority mail, we recommend purchasing insurance for any package of great value. Priority Mail is usually a 2 day service, is delivered on Saturday, and is often cost effective for lighter packages. Express mail can be delivered overnight 365 days a year to certain areas and 2nd day to other areas with tracking available. **Delivery confirmation** is strongly recommended on all USPS packages that do not have tracking numbers, this is an additional expense.

Motor Freight: This shipping method covers continental USA and much of Canada and is best for shipping large or heavy items. We work with several carriers who offer discounts. We will check multiple

carriers to find the best quote. **Carriers add a substantial surcharge for delivery to a residential address so it may be recommended to arrange shipping to a business address. Carriers also typically add a significant fee (\$75 or more) if a lift gate is required, so it is recommended that a forklift be available to unload the truck to avoid that cost. You may contact the carrier directly to arrange delivery time rather than request that they call you (they have been known to charge as much as \$40 for the call).** If you desire the carrier's 'PRO' number (tracking number) and local terminal number, please contact us. Shipping glass (carboys and bottles) by truck becomes cost effective somewhere between 500 – 1000 lbs. You must be present when a delivery is made, and you will typically be responsible for unloading the delivery- not the driver.

CANADIAN CUSTOMERS

We happily serve our Canadian customers, and are able to ship to Canadian addresses via our website or phone orders. When paying by credit card the exchange rate is calculated automatically.

INTERNATIONAL SHIPPING

We will happily ship internationally with credit card orders when the customer is willing to pay the costs of shipping, customs, fees, and other related costs. We invite you to call us to inquire about the cost of international shipping. We will confirm costs on all international orders with the customer before shipping.

SHIPPING ERRORS

Our packing staff is very diligent and proud of their work but occasionally can make mistakes. If a mistake is made, we will work accordingly to correct the problem. Please call or email immediately if you believe we have made an error – wrong product, missing product, incorrect quantity, etc. – and we will work with you to resolve the issue in the most advantageous way.

Shipping and Other Information

RECEIVING, DAMAGE, & RETURNS

It is very important to check all packages/items, preferably in the presence of the delivery driver to ensure that all items are received and in good condition. If your package is damaged you have the ability to refuse the delivery and it will be sent back to PIWC. If you choose to keep the package, but open it in front of the driver to ensure that its contents are intact, please be aware that you will lose the ability to refuse it and you will be required to create a claim with the carrier. Any damage to the package before accepting it should be documented by the driver on the shipping bill before being signed by the customer. If the damage is concealed, report it upon discovery and retain goods and packaging until your claim is satisfied unless the carrier acknowledges

responsibility in writing. Document any damage through pictures to create a personal record of the condition of your package upon arrival. The longer that inspection of the package is delayed on the receiver's end, the greater the chance becomes that a claim will be denied.

It is required that contact is made with us BEFORE returning any damaged goods. A detailed description of any problems you may have had with your package will need to be documented. We may be able to resolve the matter without further shipping costs to either party.

Please call us at our toll free number, (800) 488-7492 or, if you are local, at (814) 725-1314. You can also reach us via email at info@piwine.com.

Parcel post shipments are not insured unless you are shipping via priority mail or otherwise request it for an additional fee. All other carriers' shipments are insured up to \$100 per package and the insurance is included in their rates. We reserve the right to insure packages for the actual value of the shipment if we deem it necessary; an additional fee will be included in the shipping and handling charge. **If concealed damage is discovered, contact the carrier immediately.** Although our responsibility ends when we have delivered your order to the carrier we are willing to assist with the handling of claims. It is the customers' responsibility to report damage upon delivery or discovery. Again, photo documentation of the concealed damage in the context of the package is recommended. If you would like assistance with your claim, please email or call and we will assist you to the best of our ability.

WINERIES AND COMMERCIAL ACCOUNTS

Where applicable, we offer discounted volume pricing to meet your needs. Products designed for the commercial market are priced accordingly. For larger orders, or for products not listed in this catalog, please contact our sales department at 800-488-7492 for a custom quote.

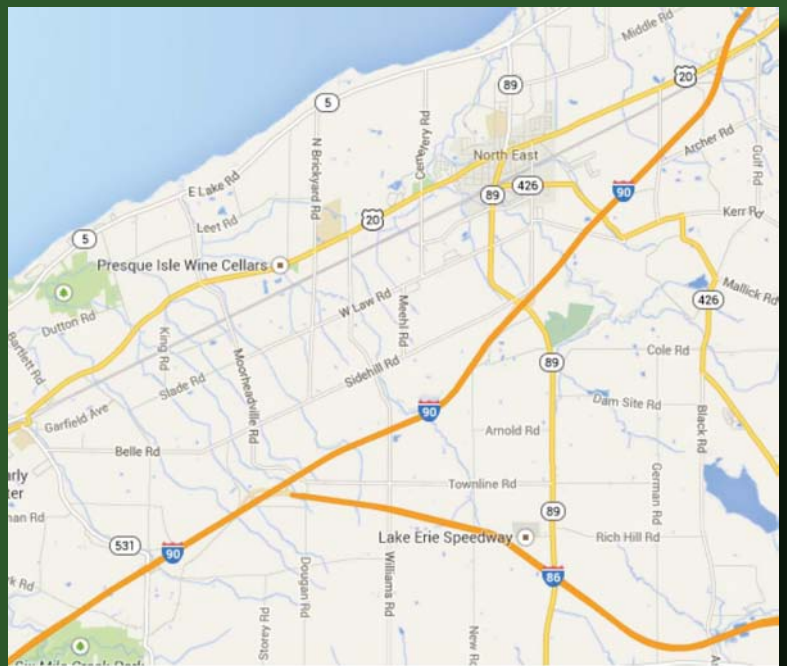
DIRECTIONS

Traveling west on Interstate 90: Get off I-90 at PA Exit 41 (first exit in PA) and proceed west on US RT 20 about seven miles through the borough of North East village to #9440. PIWC is on the right (north) side of US 20, just past Catholic Cemetery Road.

Traveling east on Interstate 90: Use PA Exit 35 (Harborcreek) and proceed north on PA RT 531 three miles to US RT 20. Turn right on US 20 and proceed 3.8 miles east to #9440. PIWC is on the left (north) side of US 20. An easy to locate landmark is the intersection of Moorheadville Road and then continue east exactly one mile.

Traveling north on Interstate 79: Proceed to the interchange with I-90 eastbound toward Buffalo, NY. Once on I-90 East, follow the direction for eastbound shown above.

Visit us online at piwine.com/map-directions.html for a full interactive map for your convenience.



Technical Information & Measures for Chemicals & Additives

The process of adding different chemicals and additives to your wine may be overwhelming and confusing. Over the years, the winemakers and product experts at Presque Isle Wine Cellars have developed various formulas, equivalents, and tips that may make the process of perfecting the chemistry of your wine easier for you. If you still have questions, please call! We strive to make winemaking as easy and enjoyable as possible, and would be glad to assist you.

Calculating Sulfur Dioxide (SO₂) ppm

For your convenience, we have provided you with a formula that calculates how many grams of SO₂ are needed to attain a particular ppm (1 mg/L = 1 ppm) level in a specified number of gallons of wine.

$P \text{ gr/L} = \text{desired ppm in grams per liter (divide milligrams by 1000 to convert to grams)}$

$Y \text{ gallons} = \text{number of gallons of the batch/container of your wine}$

$$\frac{P \text{ gr/L} \times 3.785 \text{ L/gallon} \times Y \text{ gallons}}{0.576} = \text{Grams of SO}_2$$

Measuring Equivalents

- 1 ounce (oz) = 28.349 grams
- 1 fluid oz = 29.57 mL
- 20 drops of liquid = 1 mL
- US qt= 1.056 L
- 454 grams= 1 pound (lb.)
- 1 kilogram= 2.204 lbs
- 1 gram x 0.035 = ounces
- 3 Tsp= 1 Tbs
- 1 quart = 0.947 liters
- 1 gallon = 3.785 liters
- 1 pint (16 oz) = 473 milliliters
- 1 gallon = 128 ounces
- 1 gallon water ≈ 8.35 lbs
- 2 cups sugar = 1 lb.
- 1 lb. = 16 oz
- 1 hectoliter= 26.4 gallons
- parts per million (ppm) = 1 milligram per liter, 1 milligram per kilogram or 1 milliliter per liter
- 1 gram of potassium metabisulfite (SO₂) in one gallon = 150 ppm
- 1/4 teaspoon (≈1.5 grams) of SO₂ = 225 ppm SO₂ in one gallon or 45 ppm in five gallons (see SO₂ formula above for more).
- (F° - 32) ÷ 1.8 = C°
- C° x 1.8 + 32 = F°

How Much is a Gram?

In the absence of a gram scale, you should use level measuring spoons to weigh out chemicals. Accurate to ± 10%.

CHEMICAL	1/4 TSP	1 TSP	1 TBSP
Acid Blend	1.17g	4.67g	14.0g
Ascorbic Acid	1.12g	4.47g	13.4g
Bentonite, KWK, Agglomerated	1.22g	4.90g	14.7g
Calcium Carbonate	1.00g	4.00g	12.0g
Citric Acid	1.20g	4.80g	14.4g
Diammonium Phosphate	1.18g	4.70g	14.1g
Fermaid Nutrient	1.11g	4.43g	13.3g
FT Rouge fermentation tannin	0.64g	2.57g	7.7g
Gelatine, Powder	0.83g	3.33g	10.0g
Goferm Yeast Hydration Nutrient Powder	0.75g	3.00g	9.0g
Grap Tan E, Tannin, Powder	0.47g	1.87g	5.6g
Grap Tan PC, Tannin, Powder	0.38g	1.53g	4.6g
Grap Tan S, Tannin, Powder	0.46g	1.83g	5.5g
Grap Tan V, Tannin, Powder	0.45g	1.80g	5.4g
Isinglass (Drifine) Powder	0.45g	1.80g	5.4g
Malic Acid	1.02g	4.07g	12.2g
Micro Essentials M-L Nutrient	0.63g	2.53g	7.6g
Natural Grape Tannin, Powder	0.61g	2.43g	7.3g
Noblesse powder	0.80g	3.20g	9.6g
Opti-Red inactivated yeast	0.75g	3.00g	9.0g
Opti-White yeast derivative	0.78g	3.13g	9.4g
Potassium Bicarbonate	1.38g	5.50g	16.5g
Potassium Bitartrate	0.98g	3.93g	11.8g
Potassium Caseinate (Kolorfine)	0.86g	3.43g	10.3g
Potassium Metabisulfite	1.62g	6.47g	19.4g
Potassium Sorbate	0.55g	2.20g	6.6g
PVPP Powder	0.51g	2.03g	6.1g
Sparkolloid Powder, Hot Mix	0.36g	1.43g	4.3g
Springcell Yeast Hulls	0.66g	2.63g	7.9g
Super Ferment Nutrient	1.43g	5.73g	17.2g
Tartaric Acid	1.20g	4.80g	14.4g
Viniplus, Lactizyme, Powder	0.58g	2.30g	6.9g
Yeast Ghosts	0.82g	3.27g	9.8g
Zymo Aroma Enzyme, Powder	0.61g	2.43g	7.3g
Ovo Pure, Powder	0.56g	2.23g	6.7g
Oak Chips, American			5.1g
Oak Chips, French			4.6g
Oak-Mor Premium, White Oak, Granules			4.4g
Oak-Mor Toasted, Granules			6.2g

Presque Isle Wine Cellars Table Wines

Our Wines



Doug Moorhead

Presque Isle Wine Cellars produces and offers a wide array of wine varieties and styles to suit the range of our customers' tastes. We care greatly about producing the finest quality wines possible.

Under the leadership of **Doug Moorhead** and our Winemaker, **Kris Kane**, recently named one of the 100 most influential winemakers in America, we have consistently produced many award winning wines, and the Presque Isle Wine Cellars brand is recognized as a quality leader in the region.

Starting with the knowledge that great wine must start with great grapes, we have established long and close relationships with, and buy our fruit only from the best regional growers who have committed to best practices, and to our quality standards.

Under the watchful eye of our Winemaker, our high quality grapes are given equal care and scientific rigor through the crushing, fermentation, racking, aging, and bottling stages in their transformation into high quality wine. That care and insistence on only using the best grapes available has resulted in our wines consistently winning awards in prestigious international wine competitions since our winery opened in 1969.

Presque Isle Wine Cellars produces many excellent traditional dry and semi-dry *Vitis vinifera* and French Hybrid varietal wines, as well as some exceptional Ports and Dessert wines under our flagship Presque Isle Three-Sails label.



We also serve our customers who prefer sweeter native *Vitis labrusca* based varietal wines and blends under our Creekside and Blue Heron labels.

Join our Wine Club to experience our award winning wines regularly delivered right to your doorstep.

*Visit
piwine.com/wine-club.html
to learn more.*



Kris Kane

WINERY HISTORY

Our location on the southern shore of Lake Erie is not by accident. We began with one foot firmly in the vineyard, striving to produce top quality wines from locally grown grapes. Through the years, our area has seen an increase in both the quality and quantity of the grapes grown for winemaking. The distinct quality of the region's wines has led to it being recognized as an American Viticultural Area: The Lake Erie Region. To learn more about our unique region, visit our [website](#).

We are a member of Lake Erie Wine Country, an organization of 24 Pennsylvania and New York wineries situated along the southern shore of Lake Erie. The group sponsors several events and wine weekends throughout the year. To learn more about the organization or to request a brochure, visit www.lakeeriewinecountry.org.

We produce about 28,000 gallons (nearly 11,800 cases) of wine each year making us one of the largest producers of finished wine in all of the Lake Erie Region. We also offer bulk wine and custom bottling throughout the year. For more information contact us at 800-488-7492. All of our wine can be sampled and purchased at our on-site Isle House facility, but is also available at multiple state and local festivals throughout the year. Visit our [website](#) for up to date information. Additionally, some varieties are sold in select PA State Stores and can be found in many local restaurants. We are also able to ship wine orders within PA and to certain other states – visit piwine.com for an up to date list.

Along with our wines, PIWC has been a leader in the winemaking supplies and equipment industry since 1964. "Everything for the Winemaker" has been the motto here since the day we opened our doors, and whether you are a beginner or a pro, we are not only here to provide you with the products you need, but to help guide and educate you along the way.



PRESQUE ISLE

WINE CELLARS

9440 W Main Rd (US RT 20)
North East, PA 16428 USA

The PIWC Edge: Winemaking Supply Expertise from Award Winning Professional Winemakers

As an award winning winery, Presque Isle Wine Cellars and its staff have hands on experience with winemaking products that other winemaking suppliers do not. Our winemakers have used the majority of supplies that we sell, and offer their expertise to any customer who may have a winemaking question. When you purchase from us- you not only receive your supplies,

you receive the experience and know how that other suppliers can not offer.



We use the same supplies that we sell to produce our many award winning wines. We enter our wines in prestigious international competitions all over the United States, and consistently win medals with the majority of wines we enter, **often winning best in class.**

For more on our award winning wines and a list of our recent winners, visit us at piwine.com/award-winning-wines.html.

We offer our award winning wines for sale on our website to our customers over 21, in select states. Visit us at piwine.com/online-wine-store.html to learn more.



**Visit www.piwine.com or
call 1-800-488-7492 and Order Today**