

GOLITE User Manual

Ver 0.1 04/14/2023

GOLite is a unique new product from wine innovator – GOfermentor®. It is designed to provide a low cost solution for fermenting liquid fruit juices. The main component is a single-use liner that provides a clean fermentation environment. Remember, **great wine starts with clean!** The reusable GOLite HEAD fixture provides an easy way to sample and vent gases without the potential for contamination. It also provides temperature monitoring. Use the GOLite for white or red wine from juice or concentrate. Also, useful for cider and mead production. Available in two sizes - 60 gallon unit for up to 45 gallon batches and 330 gallon unit for up to 270 gallon batches for use with your own containers.

1. BACKGROUND

For the fermentation of liquids there are some basic requirements. The fermentation vessel must be:

1. CLEAN – must be clean to avoid loss of quality due to contamination.
2. CLOSED – to prevent undesired organisms and insects from affecting the fermentation.
3. SAFE SAMPLING – able to sample without exposure and contamination.
4. TEMPERATURE – it is essential to measure temperature and control if possible.

The GOLite device was designed to meet all these requirements at a very low cost. It is derived from the more complex, but similar, GOfermentor with built-in punch and press that is used for wine production from grape *must*. GOLite cannot be used for grape *must* or fruit that requires to be pressed.

2. COMPONENTS:

GOLite HEAD –Two sizes. Reusable. The only difference is the length of the sampling dip tube.

GOLite Head 60 (SKU GL-HEA -60)	60 gallon (45 max usable volume)
GOLite Head 330 (SKU GL-HEAD-330)	330 gallon (270 gallon max usable volume)



GOLite HEAD

GOLite LINERS – single-use. FDA food grade materials.

GOLite 60 gallon liner (SKU GL-L60 3pack)

GOLite 330 gallon liner (SKU GL-L330 6pack)

SAMPLER - A hand operated sampler (SKU SAMPLER)

Required to sample the fermentation. It can be shared between several GOLite units.

User needs to supply:

1. Suitable container in which to place the GOLite liner. For the 60gallon version, plastic or metal vertical drums are recommended. Old wood barrels with the head removed are usable. For the 330gallon version, the best option is the GOfermentorBASE, but you can use any container such as a bin, IBC bin, open top flextank, or even a vertical open head tank. The only consideration is the volume and ensuring that there are no internal protrusions that could damage the liner. The ability to use your own existing containers makes the GOLite a very economical option.
2. Pump. You need a way to pump the juice into the GOLite liner. The opening is 2" Triclamp. Contact us if you need help in sourcing a suitable pump, hose, or fittings. You will also need this equipment to pump out the finished fermentation.

3. OPERATING INSTRUCTIONS:

GOLite is very simple to set up and operate. No electrical services are needed. See the video by scanning this QR code:

SETUP

Unfold and place the liner in a suitable rigid container.

FILLING

Attach a hose to the 2"triclamp and fill liner with fruit juice. Periodically pull up hard on the liner to prevent folds from getting trapped underneath. DO NOT exceed maximum usable volume marked on the liner label.

PITCHING

Disconnect the filling hose from the top port and add nutrients through this open port. Pitch yeast suspension through the open port. Do not stir in the yeast – let it sit on the surface.

FERMENTATION

1. Pull up on the excess plastic to get a little air into the headspace. Attach the GOLite head to the 2"triclamp port inserting the sampling dip tube and temperature sensor into the liquid. Make sure the triclamp gasket is between the liner port and the GOLite HEAD. For the 60gallon size rotate the head so that the vent points towards the center of the container as shown below:



2. Adjust the vent so it is upright. As the fermentation progresses the liner will inflate and become taut. Do not worry – the vent has sufficient capacity to prevent the liner from overinflating.



SAMPLING USING HAND SAMPLER

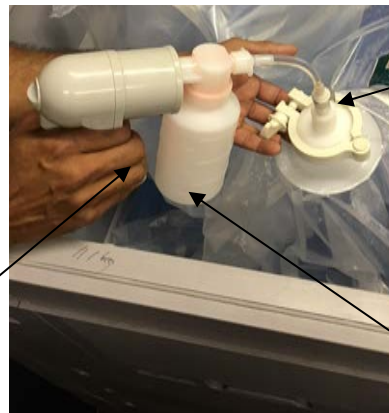
Sampling is performed by connecting the hand sampler. Connect the coupling tube to the sampler. Push the quick-connect coupler on the coupling tube onto the QC socket on the GOLite HEAD. This will open the flow path to the collection bottle. Now pump the handle to draw the sample into the collection bottle. Disconnect the sampler by pressing the release button on the QC socket. Remove the sampler. Unscrew the bottle to pour out the sample.

Coupling tube



Hand Sampler

Pump handle to fill collection bottle



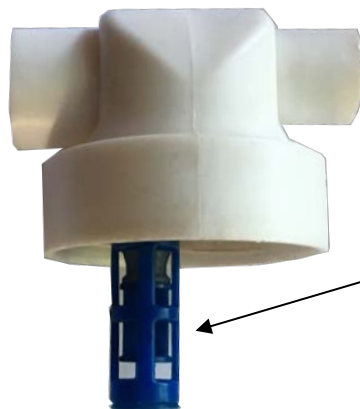
Connect to open fluid path

Sample collects in bottle

CLEANING THE SAMPLER

Dip the coupling tube on the sampler into a container of water and pump to flush the flow path into the collection bottle. Remove and rinse the collection bottle. Reattach the bottle for next use.

NOTE: Do not operate the hand sampler without liquid. Hand pumping in air will cause the overflow valve in the sampler to bind up. This can also happen if there is water in the mechanism. You will then need to remove the sample bottle and free the valve as shown below:



The valve is in this cage. If it is stuck upwards, then the sampler will not pump. Shake it so it moves freely up and down and stays in the down position.

ADDITIONS

Additions can be made to the fermentation by removing the GOLite HEAD. Allow the liner to depressurize. Make additions through the open port and then replace the GOLite HEAD. You can add small amounts of air if desired during early stages of fermentation using a small airpump to blow into the sample fitting. Use the SAMPLER coupling tube.

RACKING

After fermentation is complete, remove the GOLite HEAD. Push down on the liner to squeeze out most of the headspace gas. Now connect a 2"triclamp hose to a suitable wine pump and pump out the fermented wine. Discard the empty GOLite liner. For optimal quality use the GOfermentor SmartBarrel® system to collect and rack the wine. This proven system is based on disposable liners and stores wine safely without any need for periodic topping. GOLite coupled with SmartBarrel can form a fully disposal winery. See <http://www.gofermentor.com/>

CLEANING

GOLite requires minimal cleaning. The GOLite liners are discarded after use. There is no cleaning or wash-water usage. The GOLite HEAD should be cleaned and reused:

1. Disconnect the temperature probe and slide the display unit out.
2. Wash and rinse the outer surfaces of the GOLite HEAD. Attach the SAMPLER coupling tube to the sample QC fitting and force water through to wash out the inside of the sample dip tube and weight ball. Wash the temperature probe cable.
3. Leave aside to dry then reassemble the temperature display.

MAINTENANCE

GOLite requires no regular maintenance. Check that all fittings are secure and undamaged. The temperature display does not turn off and the batteries should last at least 6 months. Slide the unit out and open the back to replace the batteries (2x LR44).