
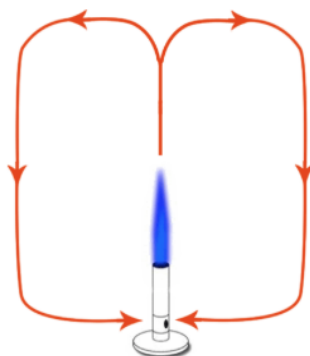


ONE POINT LESSON

	Location	Area	System	OPL#	DEPT-01
	All Facilities	Brewery		Revision #	1
Theme	Aseptic Techniques - General			Date:	2020-MAR-17

The purpose of this lesson is to ensure Aseptic Techniques are followed when sampling tanks and beers, so the integrity of the product is not compromised prior to testing.


Ethanol and Isopropanol will be used in close proximity to a flame. Ensure all safety precautions are followed when handling these chemicals.



Bunsen Burners Cone

1. Prior to collecting samples from beer cans and tanks, ensure all surfaces that may come in contact with the product have been sanitized using 70% isopropanol.
2. This includes benchtop surfaces, the outer surfaces of collections vessels (ex. Mason jars, Centrifuge Tubes, etc), any sampling ports (external and internal with a swab), the caps and can lids prior to opening, and the gloves you will be using to handle the samples.
3. Use a Bunsen Burner to maintain a sterile environment. Bunsen Burners are used to create an updraft and prevent microbes from falling into the working zone.
4. When sampling, ensure there are no drafts and that the flame is consistent, if there is air flow this process is ineffective.
5. Do not breathe/speak in the direction of the sample when collecting or plating.

ONE POINT LESSON

	Location	Area	System	OPL#	DEPT-01
	All Facilities	Brewery		Revision #	1
Theme	Aseptic Sampling - Tanks			Date:	2020-MAR-17

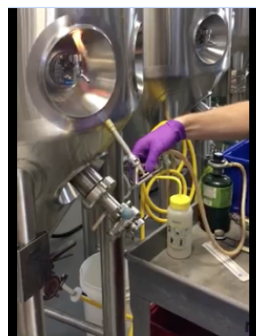
The purpose of this lesson is to ensure Aseptic Techniques are followed when collecting samples for QC analysis from tanks and fermenters from sampling ports.

Ethanol and Isopropanol will be used in close proximity to a flame. Ensure all safety precautions are followed when handling these chemicals.

2.



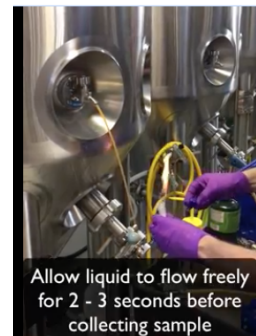
4.



5.




6.



When collecting samples from the sampling port of a tank:

1. Before starting the work, have your sampling kit and Bunsen burner ready. Wear clean gloves during the process and sanitize them prior to sampling.
2. Spray the interior and exterior of the sampling port with the isopropanol.
3. Light the Bunsen burner to create an aseptic working environment.
4. Using the Bunsen burner, flame the alcohol off of the sampling port.
5. Soak the sterile cotton swabs with isopropanol and use them to swab the interior of the sampling port. Flame sampling port again in preparation to sample.
6. Open the sampling port and allow the liquid to flow freely for 2-3 seconds. During this time, open the sampling container and flame the opening.
7. Collect a sample to the fill line, flame the opening of the sampling container, and seal the container.
8. Close the sampling port, re-isopropanol and flame the port, and turn off the Bunsen burner.
9. Label the sample with the tank and beer information, and fill out the sample submission form following the instructions on the Shipping One Point Lesson.

ONE POINT LESSON


	Location	Area	System	OPL#	DEPT-01
	All Facilities	Brewery		Revision #	1
Theme	Aseptic Sampling - Bottles and Cans (optional)			Date:	2020-MAR-17

The purpose of this lesson is to ensure Aseptic Techniques are followed when collecting samples for QC analysis from bottles and cans into sample collection vessels. If shipping the entire can or bottle, do not follow these instructions and follow the Shipping OPL.

Ethanol and Isopropanol will be used in close proximity to a flame. Ensure all safety precautions are followed when handling these chemicals.

1. Prior to sampling aseptically from a can or bottle, chill the sample for a few hours to let any microorganisms settle to the bottom of the vessel.
2. Before starting the work, have your sampling kit, an empty bucket or liquids container, and Bunsen burner ready. Wear clean gloves during the process and sanitize them prior to sampling. Sanitize the benchtop/working area with isopropanol.
3. Spray the can lid or bottle cap (+ bottle cap opener) with isopropanol. Let sit for 15 seconds.
4. Light the Bunsen burner to create an aseptic working environment.
5. Pour off the excess isopropanol from the cans and bottle caps, flame the lid and open the vessel.
6. Into the bucket or liquids container, slowly pour out most of the beer and save about 50mL at the bottom of the vessel. This allows for the microorganisms to be concentrated into a smaller volume, which is ideal for plating.
7. Flame the opening of the vessel, and carefully rouse the remaining 50mL to suspend the microorganisms.
8. Open the sampling container, flame the opening of both the container and the beer vessel, and collect a sample to the fill line.
9. Label the sample with the tank and beer information.
10. Repeat with all other samples, re-sanitizing gloves and workspace between sample collections.
11. Fill out the sample submission form following the instructions on the Shipping One Point Lesson.

ONE POINT LESSON

	Location	Area	System	OPL#	DEPT-01
	All Facilities	Brewery		Revision #	1
Theme	Shipping to Escarpment Labs			Date:	2020-MAR-17

The purpose of this lesson is to ensure that samples are well secured prior to shipping and ensure they reach Escarpment Labs intact.

Ship samples to:

Escarpment Laboratories % QC Dept; 8 Smith Ave, N1E 5Y5, Guelph, ON

SAMPLE PREPARATION AND LABELLING:

1. Please ensure that the **samples are collected aseptically**. Ensure samples are well secured (ex. lids are taped up/parafilmed, cans and bottles are secured with bubble wrap/craft paper). Any leaking or broken samples will not be tested, as the integrity of the sample is compromised.
2. Samples **must be labelled** in a manner that is clear to understand and **must match the sample name in the submission form** (<https://tinyurl.com/y7zq3oj4>). The sample submission form must be completed in full for the samples to be processed.
3. Create one sample entry per sample to be tested.
4. **If you are a new customer** (have never placed a yeast order or submitted samples for QC), please fill out our customer form here:
<http://www.escarpmentlabs.com/customerform>

PREPARING SAMPLES FOR SHIPPING

1. If possible, ship all samples on ice and supply bubble wrap and craft paper in the shipment if it contains glass or cans.
2. Confirm all samples are labelled and match the online submission form entries prior to shipping - this is essential for record keeping for both Escarpment Labs and your brewery.
3. Ship samples through UPS and FedEx, as Canada Post is subjected to delivery delays that can affect the integrity of the samples and turn around times.
4. Preliminary Reports are sent out after 3 days of incubation. Final Reports may vary from Preliminary Reports as some microorganisms require longer incubation periods before they can be detected.

PLEASE NOTE THAT QC SAMPLES WILL NOT BE PROCESSED UNTIL THE QUALITY CONTROL SUBMISSION FORM IS FILLED OUT. SAMPLES ARRIVING FRIDAY MAY NOT BE PROCESSED UNTIL THE FOLLOWING MONDAY. SAMPLES HAVE A STANDARD TURN-AROUND TIME OF 7 DAYS UNLESS SPECIFIED OTHERWISE BY THE CUSTOMER. REPORTS FOR QC JOBS THAT FINISH ON A WEEKEND OR HOLIDAY WILL BE SENT OUT THE FOLLOWING BUSINESS DAY.