

Olive Oil Sampling Guidelines for Chemical Analysis

Any sample taken for analysis must be representative of the product that is filled into bottles for retail sale and must also be protected from damage so that the results obtained for the sample are a true indication of the quality of the oil.

Where all of the oil to be analysed is stored in one tank then the oil will be homogenous and the samples for analysis can just be drawn off directly from the tank. Where the oil is held in more than one tank then a weighted average sample will be required. For example, if the oil is held in three tanks containing 500, 300 and 200 litres of the oil to be analysed then sub samples will need to be drawn off from the three tanks in the ratio 5 : 3 : 2. Sub samples of for example 100, 60 and 40ml would be drawn off from the three tanks respectively, combined and mixed well prior to taking the 50 ml samples for analysis."

For ONZ Certification, two 50mL samples of oil are required. One is to be sent to AsureQuality (see below). The other (also clearly labelled) should accompany the two retail bottles of oil that are sent for sensory analysis by the ONZ Sensory Panel to Plant & Food Research, Consumer & Sensory Science Facility, 120 Mt Albert Road Mt Albert, AUCKLAND.

Containers for Chemical Analysis Samples

Please use standard 50mL dark glass bottles and caps. These are available free of charge from the ONZ Chairperson in each region or directly from the ONZ Executive Officer.

Procedure for Sampling

- The samples should be taken in the same manner as retail bottles, ensuring that the tap is adequately flushed (at least 15mL of oil is run out of the tap and discarded) before the sample container is filled. Oil that remains in the tap from previous use is likely to be in contact with air and may have started to undergo oxidative rancidity.
- Samples must be representative of the oil that goes into the retail bottles. Ideally, there is no sediment on the bottom of the tank. If there is, take care to leave it undisturbed.
- The sample container should be filled to within approximately 1cm of the top to minimise the amount of oxygen in the container.
- If possible, flush the space in the top of the bottles with nitrogen or argon before screwing on the cap firmly.
- Protect the samples from degradation. This is done by ensuring the samples are not subjected to extremes in temperature and are protected from light. They need not be refrigerated. However they should not be subjected to high temperatures.
- Label the bottles adequately so as the sample/s can be clearly identified. Include the date sampled, batch number for the oil, and grower identification. It is best if the label is written on a self adhesive label attached to the bottle rather than writing directly on the bottle with a felt pen as any oil spilt on the outside will remove felt pen from the bottle.
- Pack the samples adequately to ensure they are protected from breakage. Use a suitable wrapping material such as bubble wrap then place in a bubble bag or box for sending by courier or post. Include the completed AsureQuality submission form in the package along with payment.
- Dispatch one sample bottle of each oil as soon as possible to:

AsureQuality Ltd
131 Boundary Road
Blockhouse Bay
AUCKLAND