

OLIVE OIL HANDLING AND STORAGE

AOOPA

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WHY IS OIL STORAGE IMPORTANT?

- Olive Oil does not get better with age, preserving the quality is critical for longevity and meeting best by
- Key 3 deterrents to Olive Oil
 - Temperature
 - Light
 - Oxygen

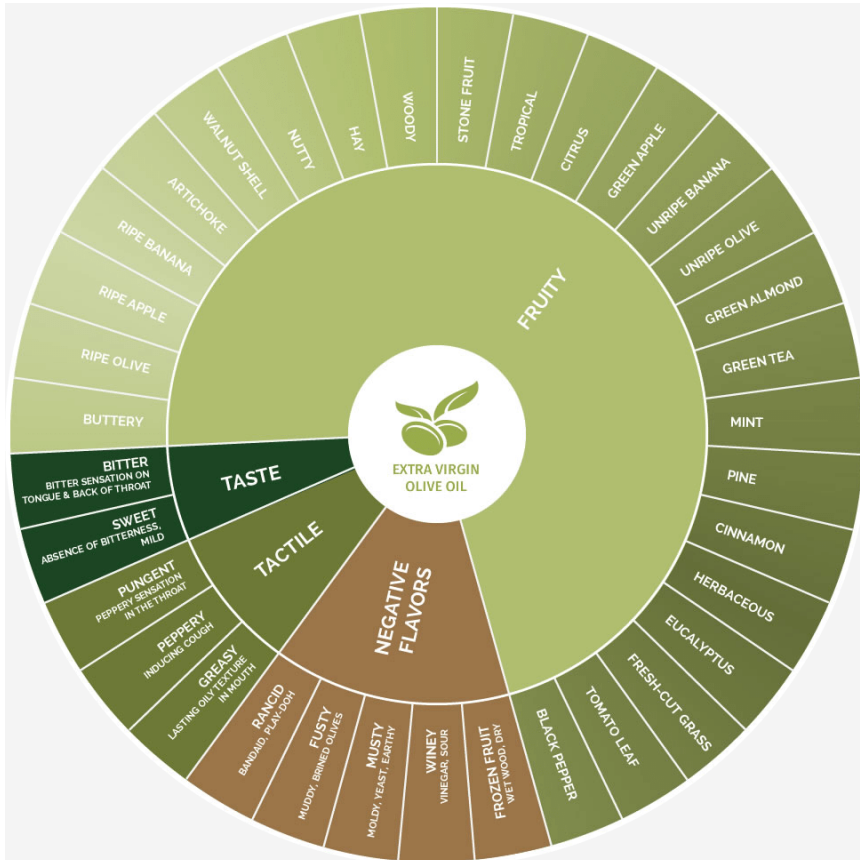


OIL HANDLING- IMMEDIATELY POST HARVEST

- Why and When to Rack?
 - time for the oil to have solid particulates naturally settle out
 - Pull oil off the sediment layer to stop any sediment off flavors and oxidation from the water
- Why Filter?
 - Research shows pro's and con's to improve shelf life
 - Important to consider
 - cost implications
 - Media type and extent of filtration-
 - mild for sediment, intense for effect on flavor
 - Time between filter- Bottling
 - effect of media residue by type of filter



OIL HANDLING- BOTTLING AND CLEANING



- Do I bottle right away or as orders come in?
 - Depends on preference, sooner the oil goes into a bottle the shelf life starts
 - With optimal storage in a tank shelf life can be used as date of bottle, not date from harvest
- How do I clean all equipment, containers, etc. to ensure re-use does not have any rancid oil effect?
 - Developing a proper cleaning plan with proper heat, chemicals, time, water, etc. to reduce oil residue
 - Over time oil residue becomes rancid and contaminates your oil with defects

WHAT CAN YOU DO?

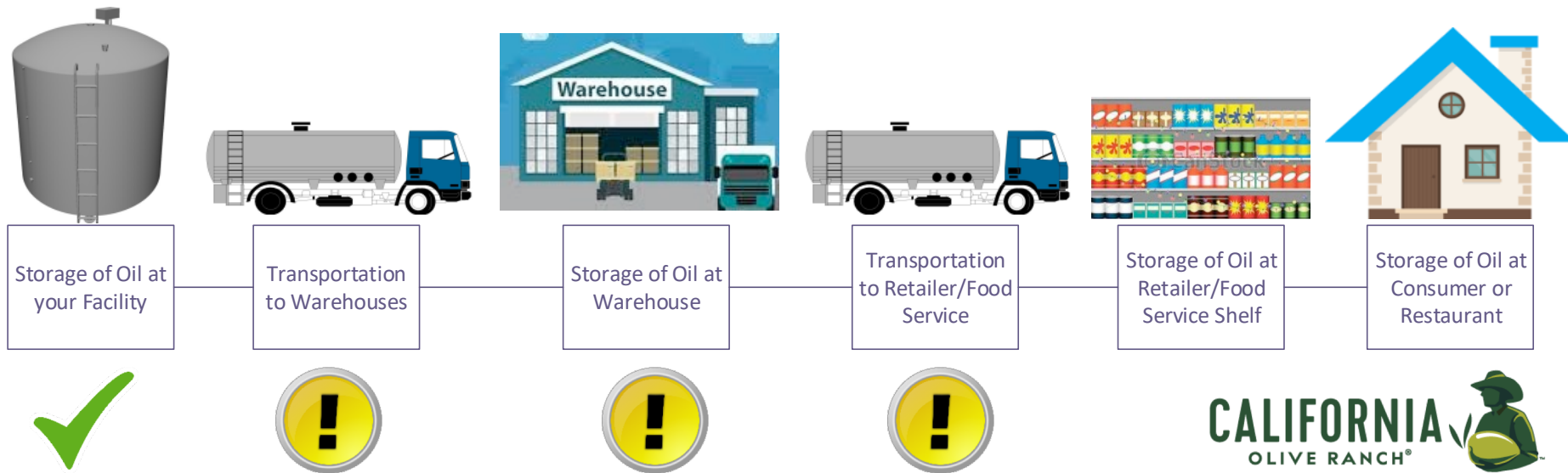
- Ensure you have best storage options when in your possession
 - **Light Storage vessel preferably stainless steel**
 - **Oxygen Nitrogen purge regularly**
 - *Argon is a back up as alternative inert gas but depletes quicker*
 - **Temperature control rule of thumb 60-70°F would be the ideal range.**
 - *Everyone has their own preference, colder is not always great the oil will solidify*
 - *Chemical parameters Fatty Acid Profile and Wax Content affect the ideal temp to keep at*
- Critical Chemistry to understand and test

UNDERSTANDING THE CHEMISTRY

Parameter	Basics on the Test	Why is this Important
Free Fatty Acid (FFA)	Degradation of the fat, indicator of the olive quality at harvest	<ul style="list-style-type: none"> The higher the value at harvest cause concern for managing a long shelf life doesn't typically change with time critical at time of harvest, not over time.
Peroxide Value (PV)	Oxidation of the fat	<ul style="list-style-type: none"> The higher the value at harvest the quicker the oil will degrade. Optimal to start as low as possible and in good storage will minimize the change over time.
UV Coefficients 232 and 270	Oxidation of the fat	<ul style="list-style-type: none"> The higher the value at harvest the quicker the oil will degrade. Optimal to start as low as possible and in good storage will minimize the change over time.
Pyropheophytin A (PPP)	Degradation of the fat, should always starts low at harvest	<ul style="list-style-type: none"> Time always affects, even with great storage conditions. Less than ideal storage conditions compound issue and exponentially effect
1,2Diacylglycerol (DAG's)	Degradation of the fat, should always starts high at harvest	<ul style="list-style-type: none"> Time always affects, even with great storage conditions. Less than ideal storage conditions compound issue and exponentially effect
Polyphenols	No ideal range, however higher preserves quality Greener fruit and milling affect the uptake of phenols in the oil	<ul style="list-style-type: none"> Natural antioxidant of the oil helps oil have a longer shelf life Higher content provides more bitterness and pungency

SUPPLY CHAIN

- Effects to oil quality can occur at multiple stages once the oil has left your possession
- Your facility is currently the only point you can truly control
- Progress to be made to help transportation, warehouses, and even retailers to improve storage to protect the oil
 - Educating retailers and chefs
 - Industry evaluation and studies on warehouses and transport. Push to mimic products like chocolate



QUESTIONS