



## Negative Attributes/Flavor Defects

# **RANCID**

Rancid is the flavor of oil which has undergone oxidation. This is the most common defect because all oil, no matter how high the quality is when fresh, will eventually become rancid. It can occur either before or after bottling, and in either an opened or unopened bottle.

The age of an oil is only one factor contributing to rancidity. Oxidation also occurs when oil is exposed to air, heat and light. No matter the cause, once the process of oxidation begins, it will advance throughout the oil. If even a small amount of oxidized oil is mixed into a fresh oil, rancidity will develop and ruin the entire batch of oil.

### *Detecting Fusty/Muddy Sediment:*

The rancid defect smells like stale nuts, wax crayons, Play-doh. It is often associated with oils described as "flat" or "greasy".

### *Preventing Fusty/Muddy Sediment:*

- Limit the oil's exposure to air during the milling process and while in storage.
- Store oil in bulk containers; only bottle as much as you will sell within a few months.
- Stainless steel containers are best for storage; light and oxygen can penetrate plastic drums.
- Add an inert gas (such as nitrogen) to fill head space in storage tank.
- Maintain temperature between 59° and 64° in storage facility.
- Limit oil's exposure to air when pumping oil into another storage tank.
- Make sure that storage containers are clean (no old oil) and dry before adding new oil.
- Bottle for consumer in protective packaging such as dark glass, UV-coated glass, tins, bag-in-box. (See bottling recommendations in Seal certification instructions.)

### *Food for Thought - Consider the Consumer Experience:*

Perhaps you've kept your oil under ideal conditions in storage but use clear glass for packaging. You sell your product to a distributor who sells to a store who displays your clear bottle on a shelf under florescent lights (or next to a window) before it is purchased by the consumer. The oil has already been exposed to light (and probably heat), and then consumer opens the bottle at home and exposes it to oxygen. How long do you think the oil will remain fresh? And how long do you think it will take for the consumer to use the entire bottle?

If a consumer has a negative experience with your oil, they won't purchase it again. You may have captured the single sale, but will lose the long-term opportunity. Packaging in clear glass is NOT recommended.