

Quality Control and Seed Oils: The basis of a well oiled business



Precision Oil Laboratories



American Oil Chemists' Society Proficiency Scheme



Contents

1. Standards are important
2. Build a database
3. Why do we need Quality Control?
4. What affects oil Quality?
5. Type of QC Tests needed for oils
6. Why use a SANAS accredited Laboratory?



Why do we need Standards ?



“If you can’t measure it, don’t mention it”



Codex Alimentarius



Codex Alimentarius is a group of international food standards, adopted by the Codex Alimentarius Commission and uniformly presented.

The very term Codex Alimentarius is taken from the Latin term **Codex Alimentarius**, meaning Food Law or Legal Food Code.

The Codex Alimentarius standards cover all basic food types, raw, semi-processed and processed, that are intended for distribution to the costumers.



Build a database

- Test your oil regularly
- Document values and conditions
- Get to know your product

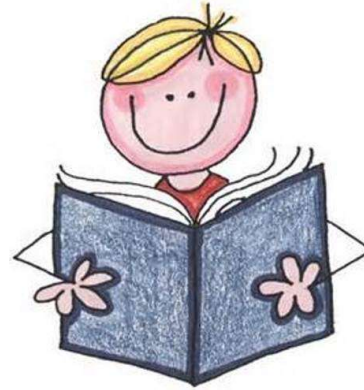


Why do we need Quality Control

- To determine needs for corrective action
- Helps meet consumer demands for better products



Educate Yourself



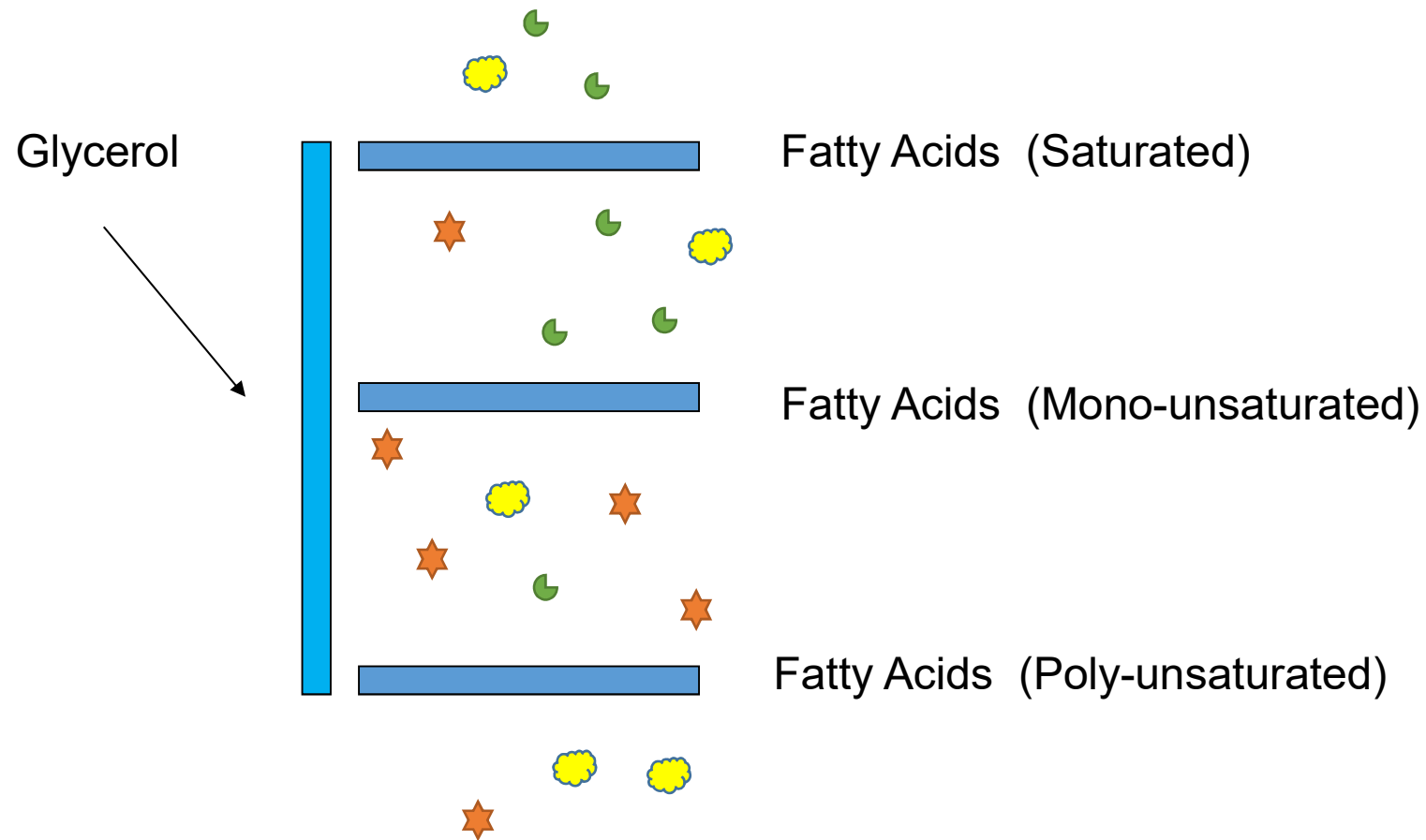
- Understand your Certificate of Analysis (COA)

- Understand which factors influence

1. Composition
2. Quality

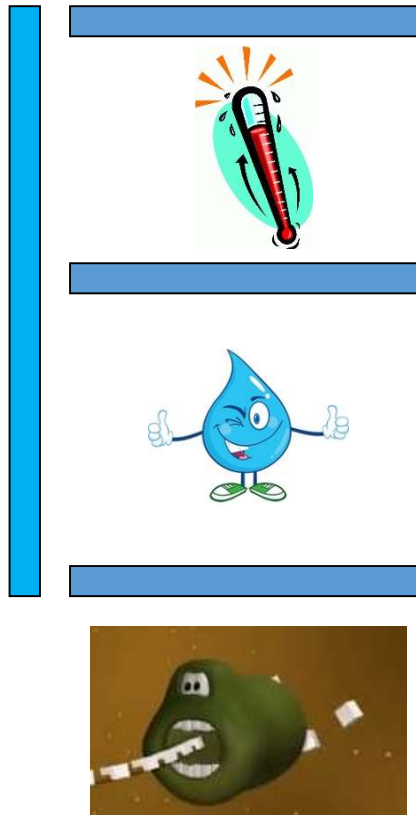


Basic Structure of Triglyceride



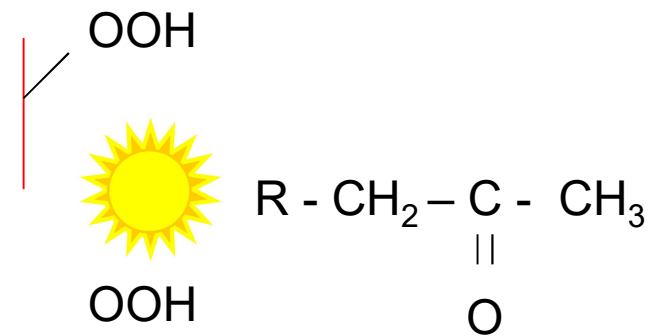
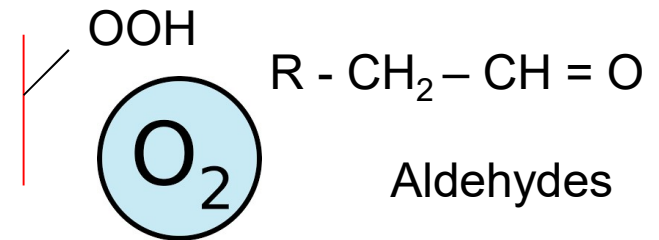
What affects Oil Quality

FFA/Acid Value

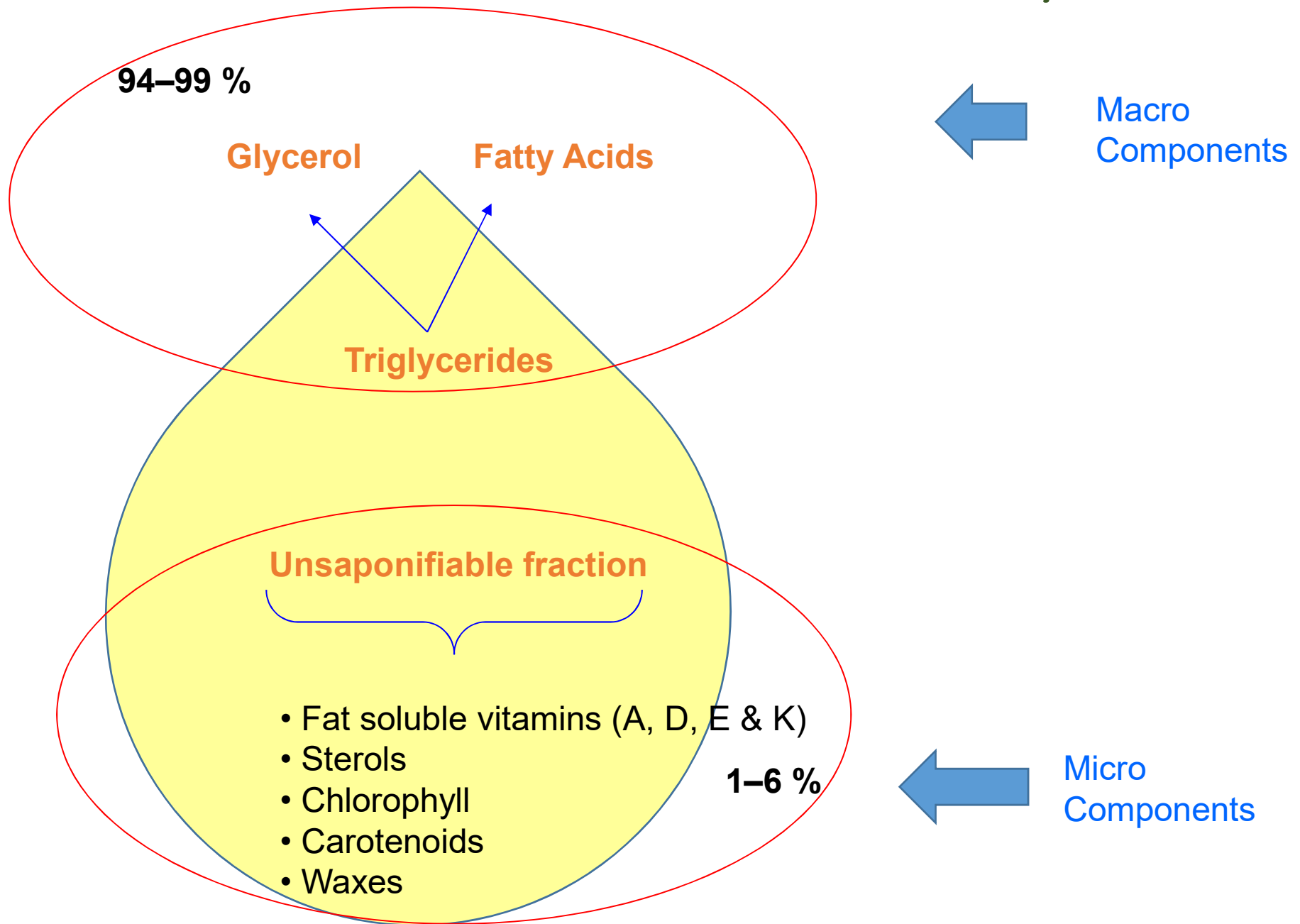


Peroxide Value

Anisidine value



What Determines Oil Quality



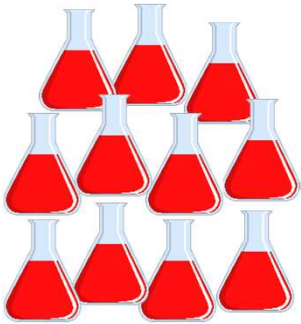
Composition of Fats and Oils

Macro Components	Micro Components
Saponification Value	Tocopherols
Unsaponifiable Matter	Sterols
Refractive Index	Phenols
Density	Carotenoids
Alkaline Impurities	Chlorophyll
Fatty Acid Profile	
Iodine Value	

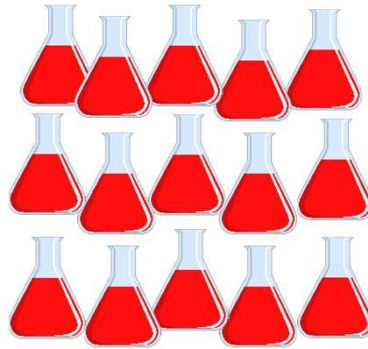


Why use a SANAS Accredited Laboratory

- Management & Technical
- Repeatability, Reproducibility, Precision, Inter Laboratory Schemes, Proficiency Scheme → UNCERTAINTY



10 x
Same day
Same Analyst



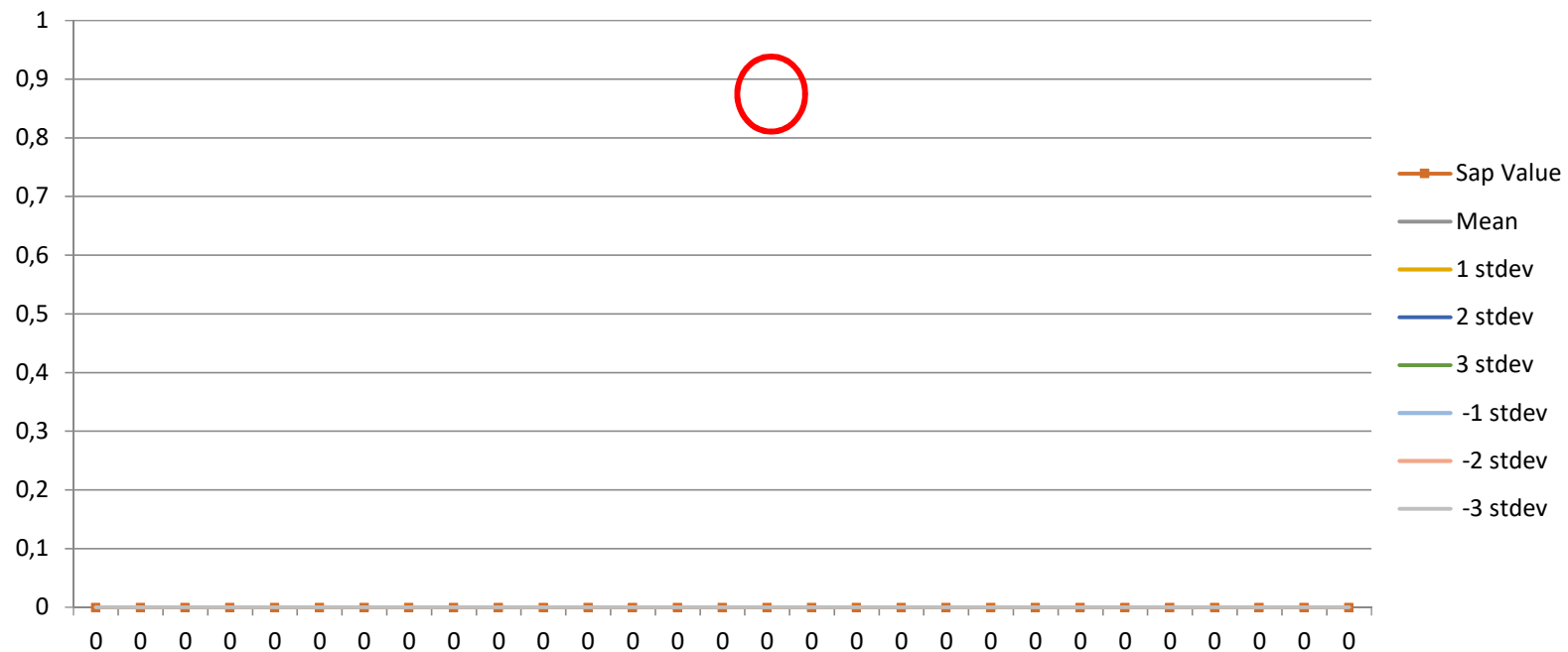
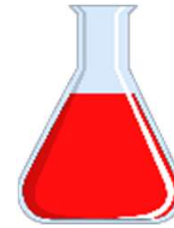
15 x
Different day
Different Analyst



Proficiency
Scheme
4 x per Year

With Each Analysis

- Quality Control Sample

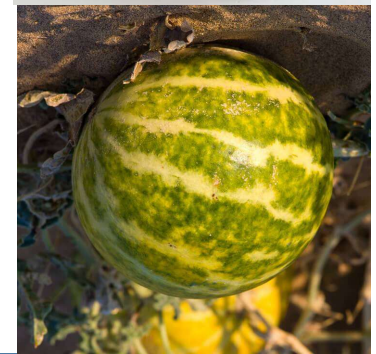




Summary



1. Standards are important
2. Build a database
3. Quality Control
4. Know Your Product
5. Educate Yourself
6. Use a SANAS accredited Laboratory



Thank you

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Precision Oil
Laboratories



**Accredited
Fats & Oils
Testing**

We do quality, composition
and authenticity testing of
fats and oils for the cosmetic
and food industries

