# Kemin is...Your Technical Expert

## **OXIDATION TESTING**

### **METHODS OF OXIDATION TESTING**

#### Stress Measurement of Induction Point

- Oxidative Stability Instrument (OSI)/Rancimat
- Oxygen Bomb Test

Accelerated Temperature Storage Stability
Ambient Temperature Storage Stability

### **METHODS OF ANALYSIS**

## Instrumental Measurement

Primary Oxidative By-Products

- Peroxide values

## Secondary Oxidative By-Products

- p-anisidine

- Alkenals

- TBARS

- Polar compounds

- Hexanals,

2,4 Decadienals

## Active Component Analyses

- HPLC - (

## Near Infrared (NIR) Spectroscopy

- DPTG - Anisidine value

- Total polar compounds - Acid value

## Colour Evolution

- Photos - Hunter Colorimeter

## **Sensory Evolution**

Colour, Taste, Odour

- Triangle test - Preference tests

- Descriptive analysis

Kemin's Customer Laboratory Services (CLS) team uses their technical expertise and problem solving skills to uncover the source of a problem and develop a tailored solution. The CLS team provides dedicated support throughout all phases of testing to understand the influences of all food ingredients on the stability of your final product to keep it safe and fresh.



Our research scientists evaluate the oxidative and microbial stability of your food products using a combination of analytical techniques and accelerated oxidation tests. We work with you to

determine your desired project objectives and the best protocol to provide you with customised shelf life solutions.

## **MICROBIAL TESTING**

#### METHODS OF MICRORIAL SPOIL AGE TESTING

#### Non-Inoculated studies

- Measurement of microbial loads in foods

## **Challenge Studies**

- Inoculation with pathogens/ non pathogens to follow inhibition

#### **METHODS OF ANALYSIS**

Disk Diffusion/Microtiter Plates
Aerobic Plate Counts
Yeast and Mould Counts
Visual Mould Evaluation
CO<sub>2</sub> Production
Moisture
Water Activity
Environmental Monitoring pH

# Maximise ingredient efficiency in your product by:

- Determining the most effective treatment
- Identifying the correct inclusion rate
- Establishing the most effective point of application

