

# TURBISCAN<sup>LAB</sup>



## ANALYSIS IN NATIVE STATE WITHOUT DILUTION

Sedimentation, aggregation, creaming... characterization on native formulation



## THE REFERENCE TECHNOLOGY

TURBISCAN<sup>®</sup> is the most used technology for stability and shelf life studies.



## STABILITY SCALE AND RANKING

A single value (TSI) calculated for each sample to assess and compare different formulations.



## PARTICLE SIZE

Determination of mean particle size and detection of size variation in concentrated media.

## PHYSICAL STABILITY & SIZE ANALYSIS OF LIQUID DISPERSIONS

STABILITY & SIZE

[www.formulation.com](http://www.formulation.com)

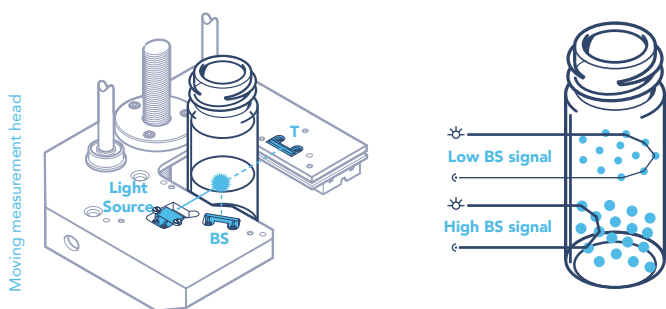
**Formulation**   
Smart scientific analysis

## TURBISCAN® - THE REFERENCE STABILITY ANALYZER

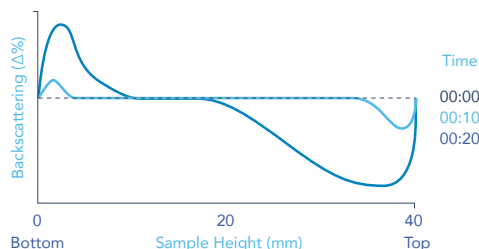
TURBISCAN® is used world-wide to detect, at an early stage, all kinds of destabilizations such as coalescence, flocculation, creaming, sedimentation... Various products (emulsions, suspensions, foams...) can be studied at full concentration range (up to 95%v/v) without dilution or sample preparation.



### MEASUREMENT PRINCIPLE



TURBISCAN® uses Static Multiple Light Scattering to detect particle migration and size variation in liquid dispersions. A measurement head moves over the cell height and works with 2 detectors - Transmission (T) and Backscattering (BS) – this offers highly sensitive and reliable analysis of transparent to opaque samples even at high concentrations. T & BS signals are related to particle size and concentration and their variation is a sign of destabilization that is occurring. Turbiscan LAB acquires T & BS intensity every 40µm and at time periods adapted to destabilization phenomenon kinetics (short or long-term stability).



### KEY BENEFITS

#### FAST AND SENSITIVE STABILITY DETERMINATION

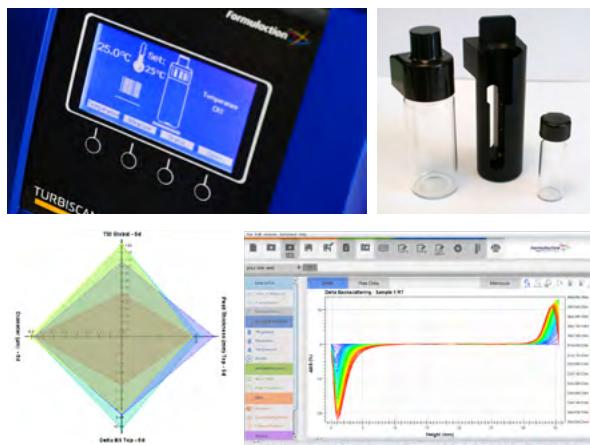
- 200 times faster than visual control
- Real storage conditions (no centrifugation or dilution)

#### A COMPLETE INSIGHT TO FORMULATION PROPERTIES

Long term stability analysis, mean diameter and size variation, phase thickness, dispersibility ratio, volume fraction, migration velocity...

#### SIMPLE AND INTUITIVE INTERFACE

Turbiscan Stability Index: evaluate and compare formulation stability with one number. Make decisions faster. Automatic reporting and multi user accounts.



### APPLICATIONS



Cosmetics



Food



Paint &amp; Ink



Oil &amp; Petroleum



Electronics



Pharmaceutical

### TECHNICAL SPECIFICATIONS

Technology	S-MLS 880 nm
Sample Cell Volume	4 or 20mL
Temperature range	RT - 60°C
Number of Samples	1
Sample concentration	0.0001 - 95% v/v
Measured size range	10 nm - 1mm
Reproducibility / Repeatability	0.1% / 0.05%
Acquisition scan step	40µm
Automatic sample recognition (bar-code)	Yes
ISO Certification	TR 13097 Compliant
Dimensions	38 x 42 x 32 cm
Weight	13 kg