

# TURBISCAN<sup>®</sup>LAB

## PHYSICAL STABILITY & SIZE ANALYSIS OF LIQUID DISPERSIONS



### The Reference Stability Analyzer

#### ANALYSIS IN NATIVE STATE WITHOUT DILUTION

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

#### THE REFERENCE TECHNOLOGY TO FASTER STABILITY TESTING

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.

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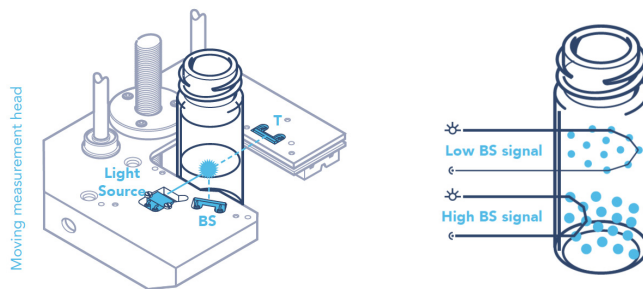
**FORMULACTION**   
Scientific instruments

# TURBISCAN - THE REFERENCE STABILITY ANALYZER

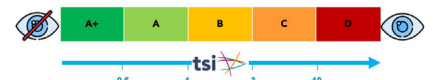
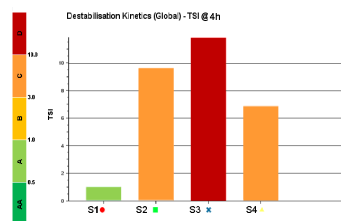
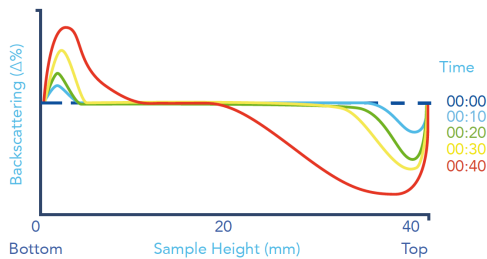
TURBISCAN is used worldwide to detect and quantify early stage destabilization, such as aggregation & flocculation, coalescence, sedimentation, and particle migration. This provides formulators a fast and reliable answer on stability measurement. Emulsions, suspensions and foams can be studied at full concentration (up to 95% v/v), without dilution or sample preparation for a real & fast stability measurement.



## MEASUREMENT PRINCIPLE



**Turbiscan LAB** uses Static Multiple Light Scattering (SMLS) 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

- 1,000 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 speed..

### SIMPLE AND INTUITIVE INTERFACE

Evaluate, compare and rank sample stability with one click and one parameters thanks to the Turbiscan Stability Index. Make fast decisions based on fact. Intuitive software and automatic reporting.

## APPLICATIONS



## TECHNICAL SPECIFICATIONS

<b>Technology</b>	Static Multiple Light Scattering (SMLS)
<b>Sample volume</b>	4 or 20 mL
<b>Temperature range</b>	RT - 60°C
<b>Number of Samples</b>	1
<b>Sample concentration</b>	0.0001 - 95% v/v
<b>Measured size range</b>	10 nm - 1 mm
<b>Reproducibility / Repeatability on latex standards</b>	0.1% / 0.05%
<b>Acquisition scan step</b>	40 µm
<b>Automatic sample recognition (bar-code)</b>	Yes
<b>ISO Compliant</b>	TR 13097, TR 18811, TS 22107, TS 21357
<b>Dimensions</b>	38 x 42 x 32 cm
<b>Weight</b>	13 kg

Distributore per l'Italia:

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www.alfatest.it  
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