TURBISCAN AGS

ACCELERATED AGING
Storage conditions from Room Temperature up to 60°C with 3 independent storage racks

AUTOMATED LONG TERM STABILITY
54 sample positions and an autosampler for high throughput stability evaluation

SHELF LIFE CONDITIONS
Real stability determination using Turbiscan LAB without mechanical stress or dilution (concentration up to 95%v/v)

STABILITY SCALE AND RANKING SIZE
A single value (TSI) calculated for each sample to assess and compare different formulations.

HIGH-THROUGHPUT STABILITY ANALYSIS OF LIQUID DISPERSIONS

BLG
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Formulaction
Smart scientific analysis

HIGH - THROUGHPUT **STABILITY ANALYZER**

TURBISCAN® is used world-wide to detect at an early stage all kinds of destabilization 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**

Moving measurement head

T

Light Source

BS

Low BS signal

High BS signal
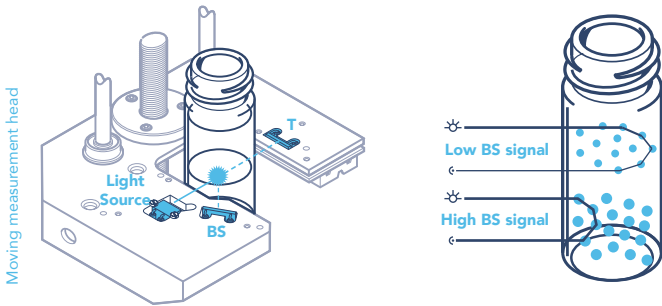
TURBISCAN® uses Static Multiple Light Scattering to detect particle migration and size variation in liquid dispersions. A measurement head moves over the cell height and works with 2 detectors - Transmission (T) and Backscattering (BS) - this offers highly sensitive and reliable analysis of transparent 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 occuring. Turbiscan AGS acquires T & BS intensity every 40µm and at time periods adapted to destabilization phenomenon kinetics (short or long-term stability).

Backscattering (Δ%)

Time
00:00
00:10
00:20

0
Bottom
20
Sample Height (mm)
40
Top
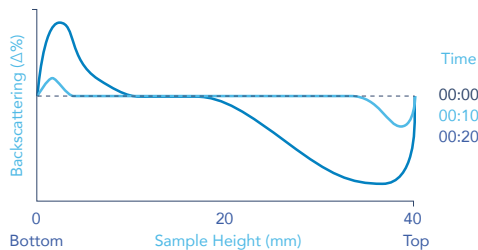
KEY **BENEFITS**

### FAST AND AUTOMATIC STABILITY DETERMINATION
- 200 times faster than visual control
- Real storage conditions (no centrifugation or dilution)
- 54 sample positions with 3 independent and thermally controlled storage racks

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. Automatic reporting and multi user accounts.
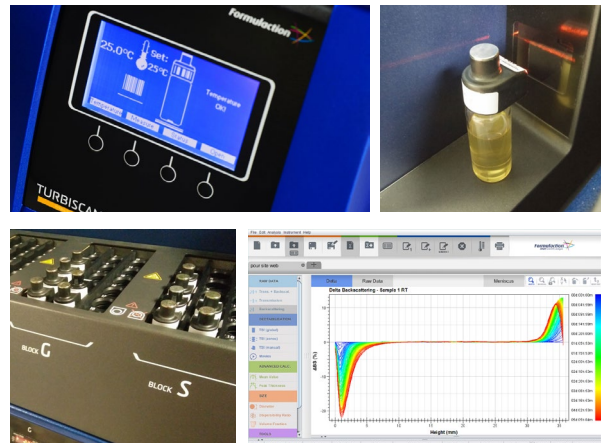
APPLI**CATIONS**

Cosmetics

Food

Paint & Ink

Oil & Petroleum

Electronics

Pharmaceutical

TECHNICAL **SPECIFICATIONS**

Technology	S-MLS 880 nm
Sample Cell Volume	20mL
Temperature range	RT - 60°C (3 racks)
Number of Samples	54
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 Compliant	TR 13097
Dimensions	145 x 75 x 85 cm
Weight	50 kg

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