TURBISCAN®AGS

HIGH-THROUGHPUT STABILITY
ANALYSIS OF LIQUID DISPERSIONS

High-Throughput Stability Analyzer

FAST & AUTOMATED TESTING ON UP TO 54 SAMPLES

54 sample positions and an autosampler for high throughput stability evaluation.

ACCERLERATED AGING

Storage conditions from room temperature up to 60°C with 3 independent storage racks.

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.

3-5 Rue Paule Raymondis
31200 Toulouse - France
T. +33(0)5 62 89 29 29
www.formulaction.com

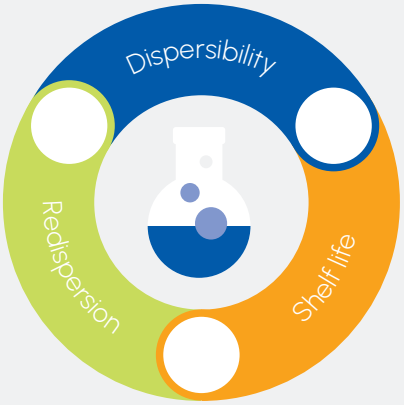
Pfarrer-Steinacker-Str. 31
86551 Aichach - Germany
T. +49 8251 8673701

250 W Old Wilson Bridge Road Ste 370
Worthington, OH 43085 USA
T. +1 (614) 888-0023

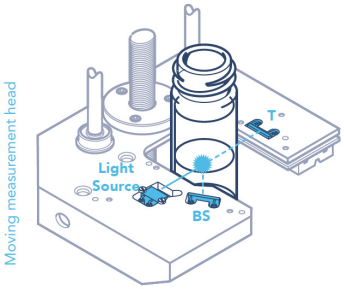
FORMULACTION
Scientific instruments

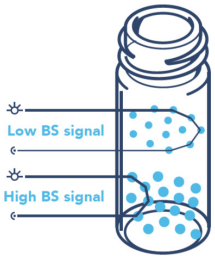
MULTI-SAMPLE ACCELERATED STABILITY ANALYZER

Turbiscan is the leading technology to detect, at an early stage, all kinds of destabilizations such as: coalescence, flocculation, creaming, sedimentation...Emulsions, suspensions, or foams can be studied at a full concentration range (up to 95%v/v) without dilution or sample denaturation. Combining the SMLS technology with the knowledge in formulation science, Turbiscan has become the solution of choice for a complete dispersion characterization (dispersibility, Shelf life, and redispersing properties).

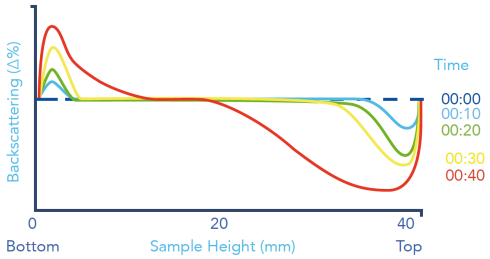


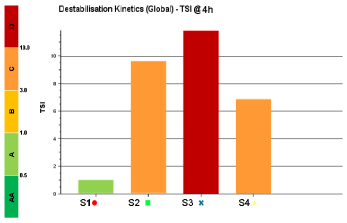
MEASUREMENT PRINCIPLE





Turbiscan 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 occuring. Turbiscan AGS 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)
- 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

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

Technology	S-MLS 880 nm
Sample volume	20 mL
Temperature range	RT - 60°C (3 racks)
Number of Samples	54
Sample concentration	0.0001 - 95% v/v
Measured size range	10 nm - 1 mm
Reproducibility / Repeatability on latex standards	0.1% / 0.05%
Acquisition scan step	40 µm
Automatic sample recognition (bar-code)	Yes
ISO Compliant	TR 13097, TR 18811, TS 22107, TS 21357
Dimensions	145 x 75 x 85 cm

3-5 Rue Paule Raymondis
31200 Toulouse - France
T. +33(0)5 62 89 29 29
www.formulaction.com

Pfarrer-Steinacker-Str. 31
86551 Aichach - Germany
T. +49 8251 8673701

250 W Old Wilson Bridge Road Ste 370
Worthington, OH 43085 USA
T. +1 (614) 888-0023

FORMULACTION
Scientific instruments