



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
Powai, Mumbai 400076

Purchase Requisition No. 1000011277 (SRM/RFX No. 6100000155)

Specification for Turbiscan

Emulsion Stability and size analysis system of concentrated formulations using Multiple light scattering method.

Method: The system should be based on multiple light scattering method and record both back scattered and transmitted light. The scans are performed in user defined quick intervals and scans are compared to provide the stability data, rate of sedimentation/ creaming and mean particle diameter with change in time on concentrated sample (no dilution)

Light Source: LED 880nm

Cell: 20ml, Cylindrical clear glass vial with screw cap for repositioning of the cell

Temp Range: RT to 60degC

Sample concentration: 0.001 to 95% v/v

Measurement size: 10nm to 1mm

Acquisition scan step: 40 micro meters

Particle Size measurement: measurement of mean particle diameter of dispersed particles in native state of samples (No dilution). The analysis must be performed by using refractive index of continuous and dispersed phases.

Stability Index: The system should provide a stability index for grading of stability.

The unit should be controlled by external PC using windows 10 compatible software and provide result of migration rate, mean particle size, and stability index, the stability index of each sample should be indicated as global stability index, bottom, top and middle zone of the test vessel.

The unit should be delivered with at least 100 measurement cells and bar code stickers.

The supplier must have delivered at least two such units in INDIA in last three years, and the reference of users should be provided.