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Thermo Scientific NanoDrop QC Software for material science

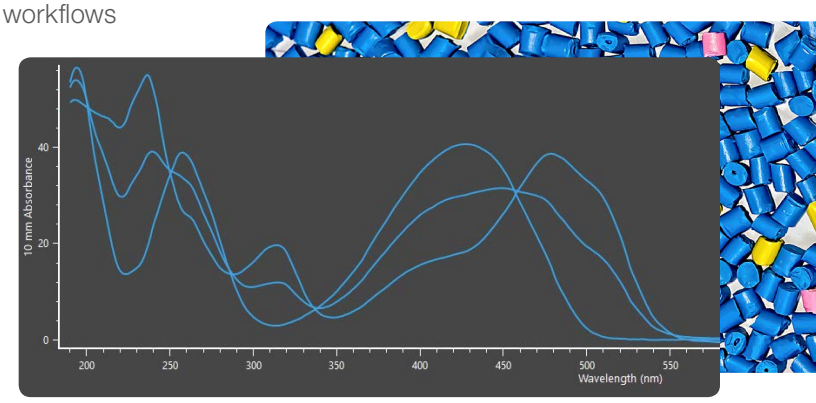
Material science quality control software for NanoDrop One/One^{C} MicroVolume Spectrophotometers

Thermo Scientific™ NanoDrop™ MicroVolume UV-Vis Spectrophotometers revolutionized UV-Vis measurements when they introduced a sample pedestal technology that allows for accurate measurement of highly absorbing samples without dilution. Life scientists have found this technology invaluable and now the material science industry can use the new Thermo Scientific™ NanoDrop QC (quality control) Software to improve their UV-Vis workflows

No more dilution

UV-Vis spectroscopy is a powerful technique used in the measurement, identification, and characterization of polymers and polymer blends. Many of these products are highly UV-absorbing species requiring large-fold dilutions to accurately measure them in a standard cuvette.

The Thermo Scientific™ NanoDrop™ One/One^{C} pedestal auto ranges between 1.0 – 0.03 mm pathlengths, allowing it to measure up to 550 Abs (10 mm equivalent) without dilution.



The dyes tartrazine and sunset yellow have overlapping spectra. When combined in a 50:50 solution, only one peak is present. The NanoDrop QC Software runs chemometric algorithms on the instrument and immediately reports component information.

Run chemometrics directly on the instrument

Chemometric algorithms are extremely useful because they can characterize complex mixtures. Previously, all batch data needed to be sent to chemometric experts to determine batch quality.

The NanoDrop QC Software allows chemometric experts to build methods and deploy them to instruments around the world. This allows technicians to obtain batch quality information immediately.

Sample location	% tartrazine	% sunset yellow
Pedestal	25.78	70.74
Pedestal	25.88	70.84
Pedestal	74.00	23.11
Pedestal	74.38	24.54

The NanoDrop QC Software displays component information

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