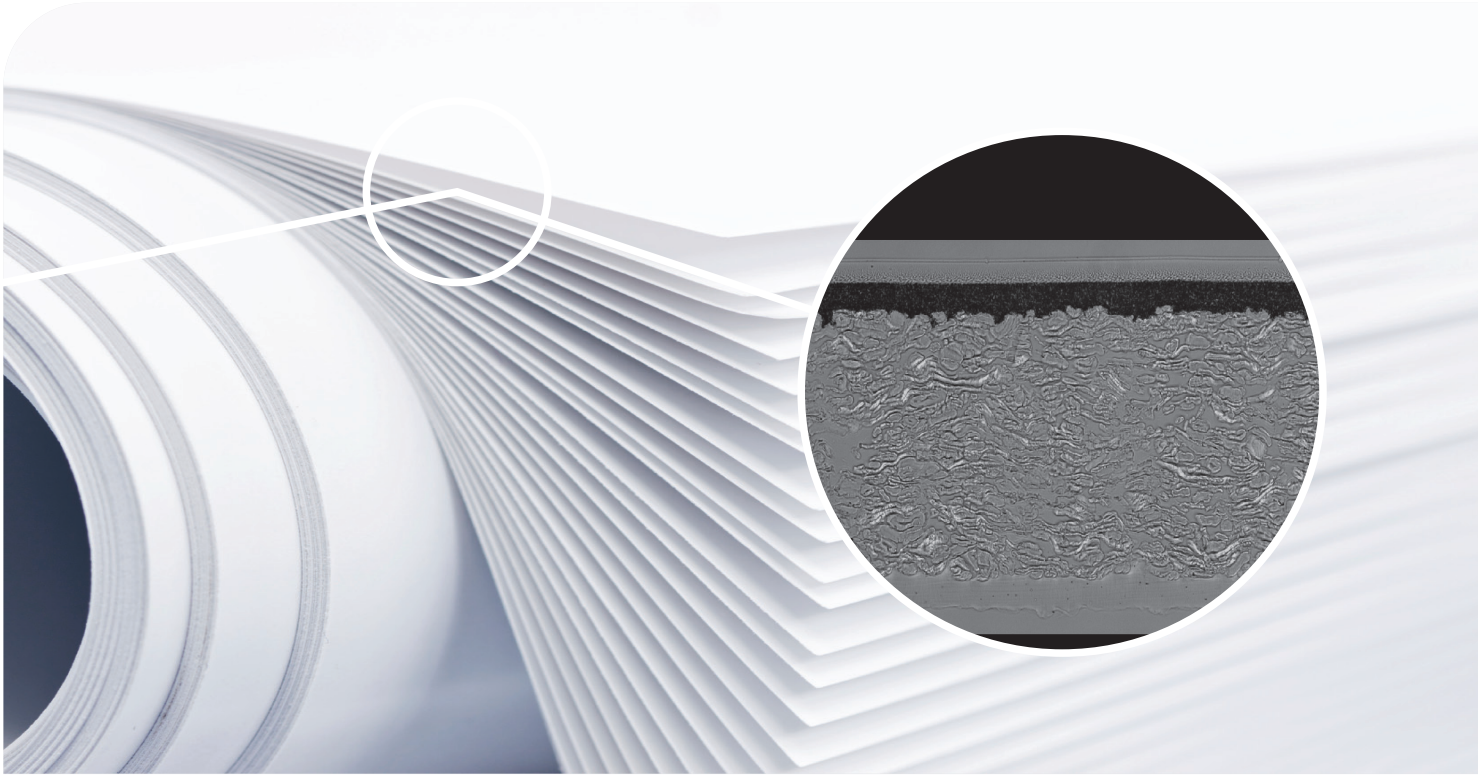


Paper Industry Services

Investigative Testing Solutions



Intertek Expert Services specialist knowledge in Microscopy, Spectroscopy and Surface Analysis can be applied to resolve both basic and complex paper related issues. This can be anything from the optical properties of paper, appearance of the bulk product, to the study of microscopic details within a single sheet of paper.

It is our unique combination of different analytical techniques and experts that is able to deliver a service to ensure you maintain your competitive edge.



- Consulting
- Standardized tests
- Laboratory tests



Consulting

General consulting

- Colourimetry (DfwG)
- Standardization working groups (DIN, ISO)
- Photophysics
- Whiteness assessment

Spectral calculations

- Light scattering
- Model calculations
- Spectra matching

Related Services

Chemical analysis

- Failure analysis
- Impurities and contaminants
- Deformulation
- Material characterization
- Migration studies
- Extractable and leachable studies

Laboratory tests

Spectroscopic measurements

- Absorption (UV/Vis/NIR)
- Reflectance (UV/Vis/NIR)
- Fluorescence
- Phosphorescence

Microscopy and surface analysis

- Paper contaminations
- Pulp types and fiber species
- Wood structure
- Paper surface texture and roughness
- Fillers, filler distribution and morphology

Microscopy and microtome sectioning

- Composition and microstructure of coatings
- Polymeric sizing agents and coating binders like latex by TEM

Applied spectral calculations

- Determination of concentrations on paper
- Kinetics (light fastness, phosphorescence decay)

Applied calculations of optical effects

- Colour matching of coloured paper
- Colour matching of white brightened/shaded paper
- Light fastness of FWAs
- Light fastness of dyes

MOSH/MOAH

- Analytical services concerning migration of mineral oil from packaging materials to foodstuffs
- Environmental Technology
- Waste management
- Manufacturing and process improvement

- Paper cross section analysis - retention of fillers, density and porosity of sheets, thickness and uniformity of coatings

Standardized tests

Calculation of optical effects

- Reflectance factors, Radiance factors (DIN 53145-1, DIN 53145-2, ISO 2469)
- Colour (CIE, ISO (ISO 5631-1, ISO 5631-2, ISO 5631-3), ASTM E308-01)
- Whiteness (CIE, ISO (ISO 11475, ISO 11476), Ganz)
- Brightness (ISO 2470-1, ISO 2470-2)
- Opacity (DIN 53146, ISO-2471)
- Transmittance (ISO-22891)
- Light scattering- and absorption coefficients (DIN 54500, ISO 9416)
- Yellowing

Intertek Expert Services

P.O.Box, 4002 Basel

Switzerland

Tel: +41 (0)61 686 48 00

Fax: +41 (0)61 686 48 99

www.intertek.com/ies

For more information please visit www.intertek.com/ies or contact us at web.cp-emea@intertek.com or call us +41 (0)61 686 48 00

To find an office or laboratory in a particular country, please visit www.intertek.com/contact.