

Polymer Testing

Global Services Portfolio



Coming from the world of polymer additives (formerly known as CIBA Expert Services) with decades of experience in stabilisation of polymers, Expert Services has become one of the leading service and solution providers for the plastics industry worldwide.

Expertise and Laboratories are located globally and cover a multitude of industries including; automotive, packaging, electronics, textile, coating, agriculture, medical devices, building products.



- Weathering and Performance Testing of Polymers
- Additives Analysis in Polymers
- Failure Analysis of Polymers



Weathering and Performance Testing of Polymers

- Natural weathering tests and accelerated UV weathering (UVA & UVB)
- Accelerated weathering tests with Xenon lamps (ASTM G155, ISO 4892, SAE J2527, SAE J2412, ISO 105B06 etc...)
- Mechanical properties of films, plates, fibers...
- Aesthetical properties (colour, gloss, cracks by microscope...)
- Characterisation (DSC, OIT, TGA, FTIR, ATR, humidity...)
- Thermal stability (long term heat aging), hot water exposure and oil exposure
- Specific tests like gas fading (exposure to NOx)
- Other properties: flame retardant, antibacterial, electrostatic, rheology...
- Polymer processing (extrusion, injection, cast films, tapes, fiber spinning...)

Our expertise in weathering and testing of polymers includes the advice to the customer in selecting the appropriated norms and tests, the weathering and the testing itself and as well advice in the interpretation of the results.

Our specialists in analytics provide comprehensive analyses of additives in all kind of polymer matrix; dealing with quality control of polymer formulations or analysis of unknown polymer additives formulations.

The whole range of analytical methods available combined with our expertise also enable us to carry out failure analysis studies helping the customer to find appropriate solutions

Additives analysis in polymers

- Additives analysis in all types of polymers (PP, PE, PA, PC, PMMA, PET, PBT, TPE, TPU, PS, PVC, elastomers, PS, PVC,...)
- Identification and quantification of known formulations (quality control) and unknown formulations
- Our database of additives contains most of the common market products like phenolic antioxydants, phosphites, thioesters, metal deactivators, HALS oligomeric and monomeric, UV absorbers, antistatic agents, flame retardants

Failure analysis in polymers

- Failure analysis concerns migration of unknown substance, contamination during production, unexpected premature degradation and others. With our techniques and our expertise in polymers and additives, we could help to identify the cause of the problem and to find solutions.
- Techniques available: FTIR, Raman, NMR, LC/MS, GC/MS, EI/MS, TDS, SEM, TEM, ...