

Films – Characterisation and Problem Solving

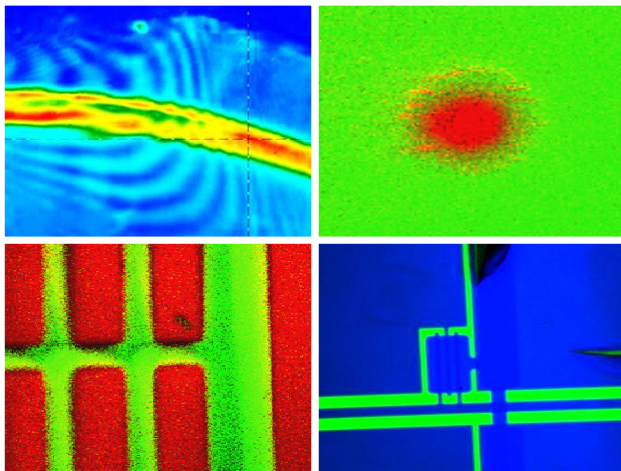
Introduction

Intertek MSG is expert in polymer film characterisation and problem solving. MSG has unparalleled experience in this sector, gained during the many years within ICI routinely investigating polymer films and their associated components, stretching back to the early 1970's. This expertise has evolved with the advances in polymer chemistry and new polymeric materials developed over the years up to the current generation of Plastic Electronics. Our knowledge extends across the entire polymer process from raw material to production through to the final product and end user. Intertek MSG provides a valuable service to our clients delivering a targeted and rapid response to problem solving and polymer film characterisation.

The following are typical areas that Intertek MSG routinely investigates in the polymer film sector.

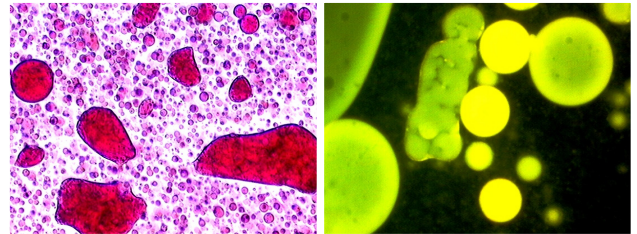
Chemical and Physical Imaging

Intertek MSG has a wide range of techniques that are routinely applied to the chemical and physical imaging of polymer films, polymer film laminates and their associated components. These techniques are powerful tools in the accurate determination of structure, the distribution of chemical species and the detection of contamination. Data presented in this way can be extremely valuable not only to our customers but also their clients where a single image can be completely self explanatory providing a clear accurate illustration of the information requested.



Deformulation and Competitor Analysis

Intertek MSG is also expert in the deformulation of polymer films and films based systems. MSG has a full range of physical and spectroscopic techniques under one roof, providing a comprehensive one-stop capability. Whether it is a full chemical and physical deformulation or a bespoke step by step analysis, Intertek MSG can provide you with the information you require.



Physical Properties

Intertek MSG routinely characterises the physical properties of polymer films, providing a huge range of testing which includes Thermal History to Rheology and crystallinity to vinyl end determination.

- Crystallinity and Orientation
- Mechanical Testing
- Structure and Morphology
- Optical and Electrical Properties
- Rheology and Thermal Properties

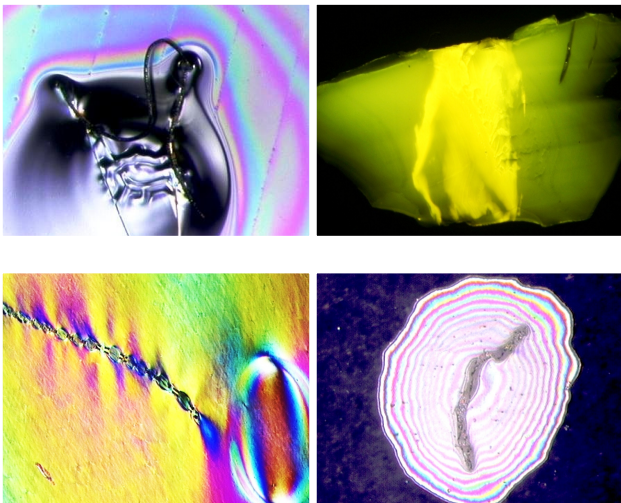
Research and Development

Intertek MSG has been heavily involved in the Research and Development of polymers and polymer films for many years. This comprehensive understanding was gained during many years within ICI's Research and Development department where we "grew up" with the advances in polymer chemistry and the new generation of polymer systems. Our capability covers a huge range of analytical testing but we also have significant experience in the development of new advanced methods and in-line process measurement which provides that added value to our clients.

Problem Solving

Intertek MSG provides an expert and rapid response to polymer film problem solving, contamination and defect analysis. Whether it is a raw material, process, product or end user related problem Intertek MSG has probably seen it before. This vast experience allows us to rapidly detect and isolate the problem components, then identify the correct method of analysis to ensure the problem is solved as quickly and efficiently as possible.

The depth of knowledge our dedicated scientists have means that our help does not stop when we have identified the contamination or cause of the problem. Our expertise in this field is such that we will probably be able to offer additional advice and support such as typical causes of problems, potential sources of contaminants plus advice on improvement plans and even on site plant audits.



Packaging

Intertek MSG has amassed vast experience of the packaging sector, after many years involvement in polymer film analysis. Whether it is characterisation such as laminate structure, advanced adhesives, novel surface coatings, or problem solving such as poor heat seal performance, print defects, delamination or general failure, Intertek MSG has the expertise to help you.

Plastic Electronics

Our experience and knowledge of polymer films has proved to be invaluable in the characterisation of the next generation of electronic products that are rapidly moving towards flexible polymer based systems.

As with any new technology, rapid development and problem solving are vital in order to minimise the time to market and gain a competitive advantage. Intertek MSG can help you characterise your materials and formulated flexible products to help increase your understanding of these components to give greater confidence when going to market.

Associated Components

Intertek MSG also routinely examines all the usual components associated to polymer film, some of which are shown below;

- Additives, Processing Aids, Stabilisers
- Coatings, Pretreats, Surface Treatments
- Residuals, Impurities, Catalyst Residue
- Fillers, Pigments, Dyes, Nano Particles
- Adhesives, Metallisation, Inks

This expertise extends across all the major polymer types, as well as bespoke novel polymer systems.

Our experience is not limited to polymer film, Intertek MSG routinely analyse polymer based products in many different forms (bottles, trays, mouldings, etc)

A full list of our capability and further detail on the information given here can be found on our web under the Polymer Film section of expertise.

If you would like to know more about Intertek MSG's polymer film expertise then please call us now to discuss how we can help you.

T: (44) (0)1642 435788

Alternatively email MSGfilms@intertek.com with a brief description of how we can help.

For information on other services and capabilities, please contact Intertek MSG on the same number or MSGenquiries@intertek.com