

Packaging Services

Food packaging not only needs to look good, it also has to protect product safety and integrity throughout the supply chain.

We understand that food packaging needs to perform on a number of levels. Our comprehensive testing service ensures your food packaging is fit for purpose.



Our specialist packaging expertise to:

- Understand the barrier protection your packaging offers your product
- Understand the mechanical strength, ease of opening and integrity of packaging materials
- Confirm if packaging is fit for purpose and select the most relevant packaging materials for your product as part of the wider product development process
- Identify the source of chemical taints and off-flavours from packaging materials
- Understand the impact of packaging materials on product shelf-life

‘With the current focus on moving to sustainable packaging, RSSL’s expertise was crucial in helping us to assess and select the best packaging solution for our product.’

Packaging Characterisation



Technical expertise

- Method development
- Manufacturing support
- Packaging / structure relationship
- Problem solving
- Counterfeit identification



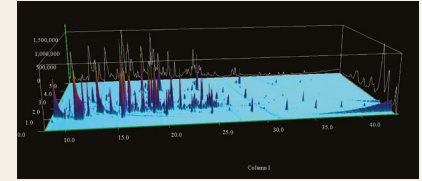
OPTICAL PROPERTIES

- Gloss and haze
- Luminous transmittance
- Colour and appearance



PERMEATION

- Water vapour transmission
- Oxygen transmission rate
- Aroma barrier



Chromatogram of volatiles penetrating barrier film

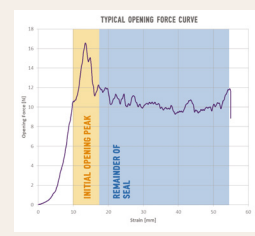
INTEGRITY

- Tests: Burst, leak, creep, bubble
- Headspace analysis



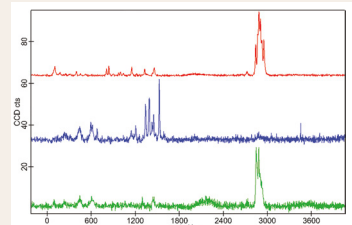
SUBSTANCE

- Thickness
- Density
- Basis weight
- Yield



STRUCTURE AND COMPOSITION

- Structural evaluation:** Raman, FTIR, SEM, light microscopy, tomography



Packaging Raman analysis

- Red – polypropylene
- Blue – ink / dye
- Green – polyethylene



MECHANICAL PROPERTIES

- Opening:** Tear and lid opening, easy opening, opening label peel
- Sealing:** Seal initiation temperature, heat seal strength, seal strength, peel test
- Material:** Tensile test, coefficient of friction, crush test, stiffness

