



TURKISH STANDARDS INSTITUTION

# TSE PACKAGING LABORATORY



## TSE Packaging Laboratory;

- Paper Based Packaging
  - Plastic Packaging
  - Food Packaging
  - Distribution Packaging
- Serving with four different departments to packaging industry.



TSE İzmir Packaging Laboratory is the most comprehensive laboratory in Türkiye, accredited by TÜRKAK within the scope of the TS EN ISO/IEC 17025 Laboratory Management System Standard, where tests on all kinds of packaging materials are carried out to meet the demands of the packaging industry with modern devices and equipment.

### ● Paper Based Packaging Department

All kinds of paper-based packaging materials such as paper, cardboard, corrugated cardboard are tested under the same atmospheric conditions. After being conditioned at  $23 \pm 1$  °C temperature and  $50\% \pm 2$  RH humidity atmospheric conditions,

- Determination of Grammage
- Determination of Thickness
- Determination of Water Absorptiveness - Cobb Method
- Determination of Bursting Strength (BST)
- Determination of Tensile Properties Breaking Strength and Elongation
- Determination of Folding Strength
- Determination of Tearing Resistance
- Determination of Resistance to Bending-Taber Type
- Determination of Roughness/Smoothness
- Determination of Puncture Resistance
- Determination of Opacity
- Determination of Whiteness
- Edge Crush Test (ECT)
- Flat Crush Test (FCT)
- Corrugating Medium Tests (CCT, CMT, RCT)
- Box Compression Test (BCT)

### ● Plastic Packaging Department

Quality control tests that can be applied with our laboratory facilities of plastic packaging and plastic raw materials are given below.

- Size Measurement
- Determination of Thickness
- Dart Drop Test
- Compression Test
- UV Resistance Test (Weathering Test)
- Tensile Strength and Elongation Test
- Melt Flow Rate Test
- Determination of Density
- Material Testing with FTIR



## ● Food Packaging Department

Testing services are provided to plastic, paper, cardboard and metallic materials that are used as food packages. Carbondioxide Permeability Test has been added to laboratory service scope in 2023 which has a significant role in determining shelf life of food just as Oxygen and Water Vapour Permeability Tests.

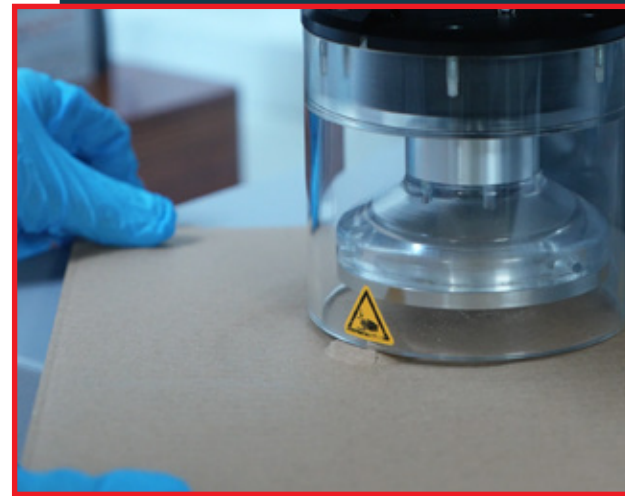
- Water Vapour Permeability Rate Test
- Oxygen Permeability Rate Test
- Carbon Dioxide Permeability Rate Test
- Determination of Tin and Chrome Coating
- Global Migration Test
- Detection of Lacquer Coating Weight
- Determination of Solvent Residue Amount



## ● Distribution Packaging Department

Performance test programs are prepared and implemented for transport packages used in land, air, sea and railways or in distribution systems where several of these means of transport are combined. By adding the chemical compatibility test to the scope of our laboratory services as of 2023, the tests required for the ADR Packaging Certificate (UN Certificate), which can be given by TSE Dangerous Goods and Combined Transport Directorate, can be applied with the facilities of the laboratory.

- Compression/Compression Strength Test
- Chemical Compatibility Test
- Drop Test
- Inclined Plane Impact Strength Test
- Flexible intermediate bulk containers- FIBCs (Bigbag) Stacking Test
- Flexible intermediate bulk containers- FIBCs (Bigbag) Top Lift Test
- Tensile Strength Tests
- Hydraulic Pressure Test
- Leakproofness Test






## TURKISH STANDARDS INSTITUTION

### How can I get service from Packaging Laboratory?

As TSE Laboratories, we have started using a new online system to carry out our transactions to serve you faster, safer and better. In order to ask questions and get the reference application guidance reach us through the communication channels are given as [ambalaj@tse.org.tr](mailto:ambalaj@tse.org.tr) and **444 0 873**

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 [www.tse.org.tr](http://www.tse.org.tr)

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