

**Intertek**

# Home Product Testing



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Intertek's global reach is our major strength linking suppliers in one part of the world with buyers in another. We independently inspect factories and goods in the countries of origin across the whole supply chain on behalf of clients and consumers located in the products' final market. In fact we can test the same product to a range of international standards if required.

Intertek has 576 offices offering inspection, auditing and certification services and 338 laboratories worldwide providing a wide range of standard and custom testing programmes.

Our resources are strategically placed, providing appropriate services in each country. These needs

are continuously reassessed, and we are constantly evaluating manufacturing and market trends to best serve our customers.

Intertek is in the ideal position to help our customers and clients meet the Quality, Safety and Ethical standards irrespective of their, or their customer's location in the

world. Our mix of testing, inspection, auditing and consultancy services is unparalleled in the consumer goods arena making Intertek the supplier of choice for many of the world's leading brands.

## Home Product Testing

Home products are around us everyday. Consumers today expect furniture and décor to suit their lifestyles, with great consideration given to quality and safety. Testing, assessment and inspection ensure this.

### Furniture

Domestic upholstered furniture, garden furniture and nursery furniture are common types, however, currently there are different international standards to control their quality and safety, such as ASTM, ANSI, BIFMA, BS, EN and ISO standards.

Different tests, assessment and inspection services are necessary to evaluate the physical characteristics, construction properties, performance and labelling of furniture in accordance with the standards, and to satisfy customers' ever-increasing expectations.

#### Performance Tests

The performance of furniture like chairs, stools, high chairs, beds, tables, sofas, shelves, children's furniture, etc can be assessed by:

- Strength Tests
- Stability Tests
- Back-pull, Base and Impact Durability Test (Chair)
- Seat-back Fatigue Test (Chair)

#### Flammability Tests

Easily flammable furniture may intensify household fires and pose even greater risk to lives and property. Flammability tests are required to test the fire resistance of furniture, cover fabrics and filling materials in accordance with international standards such as the UK Furniture and Furnishings (Fire) (Safety) Regulation 1998 and California Technical Bulletin 117.

- Cigarette Tests
- Match Tests
- Ignition Resistance Test
- Flaming and Smouldering Screening Test

#### Material Tests

Furniture, furnishing fabrics, filling materials, interliner and components of furniture are made of different materials. Chemical and physical tests are needed to test the content of hazardous substances and moisture in furniture that are harmful to humans and to test its durability.

- Formaldehyde Content
- Pentachlorophenol (PCP)
- Total Lead Content (Pb)
- Mould Count
- Moisture Content (Wood)
- Abrasion Resistance
- Colour Fastness
- Tear Strength

#### Inspection Services

- Assembly Check - For wooden and knockdown furniture, individual pieces of furniture are checked for stability and overall appearance. Surfaces, drawers, doors, joints and gluing are also examined.
- Colour and Finishing - Check the paint quality, colour and finish of furniture
- Evaluation of Product Design & Packaging
- Labelling Assessments - All new furniture on display and supplied to consumers should carry appropriate display and permanent labels, with compliance information and caution statements.

### Bedding Items

Consumers have direct and prolonged contact with certain bedding materials such as cushions, pillows, padded blankets and sheets. Bedding items are subject to control under international and national standards.

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### Performance Tests

- Dimensional Stability to Washing
- Appearance after Wash
- Colour Fastness to Washing, Chlorine & Non-Chlorine Bleach, Crocking, Perspiration and Saliva
- Strength Tests - Seam Properties, Tearing & Tensile Strength Tests
- Penetration Resistance to Filling Materials
- Thermal Properties (TOG)

### Flammability Tests

Consumers have a lower responsiveness towards danger during sleep. In the case of a household fire, there is added risk if the bedding is easily flammable. It is crucial therefore to ensure the fire resistance of bedding items through flammability, cigarette and match tests.

### Material Tests

- Hazardous Substances Tests - Azo dyestuffs, formaldehyde, heavy metals, etc.
- pH value - To ensure that the pH is suitable and safe.
- Hygiene Test - To test the turbidity of the water extract, oxygen and microbiological content for bedding items filled with feather and down.

### Inspection Services

- Evaluation of Fabric Quality & Product Designs
- Assessments of Fibre Identification & Care Labels

### Home Décor

Families today decorate their homes more than in the past. Many decorations change with the season like Christmas and Halloween decorations and many decorations like vases, ceramic figures, picture frames, and clocks remain in place all year. Whether seasonal or permanent, consumers are often unaware of potential dangers. Reliable performance and material test results can help minimize potential dangers and ensure the safety and quality of the decorative items.

### Performance Tests

- Drop Test
- Sharp Point / Sharp Edge Test - To assess the risk of laceration and puncture hazards and injuries due to sharp end points and edges of the item and its accessories.
- Tension Test
- Impact Test
- Compression Test

### Flammability Tests

To ensure that decorations like lights, festival candles and candleholders are resistant to heat and fire.

### Material Tests

Chemical tests are performed to assess the content of hazardous substances of surface coatings like lead in paint and the cleanliness of stuffing materials.

### Inspection Services

- Small Parts - to assess the risks of choking hazards to children
- Product Design - to review whether potential dangers and product defects exist
- Labelling - to ensure there is appropriate labelling with caution statements, usage instructions, choking hazards, age labelling, and hazardous materials labelling

### Candle Products

Candle products including dinner candles, room scenters, decorative candles, gel candles, nightlights, tealights, candleholders and lanterns have become very popular.

This, however, is accompanied by an increase in related accidents such as household fires, property damage and burn injuries.

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Toxic coating materials and soot may also cause adverse effects on health. A comprehensive protocol of performance and material testing, and labelling assessments is tailor-made to ensure the safety compliance of candle products with controls including RAL-GZ041 Candles Quality Control and General Product Safety Regulations 1994.

## Performance Tests

- Burning Behaviour
- Stability
- Soot / Smoke
- Burn Time
- Wick Behaviour
- Flame Heights
- Temperatures
- Safety of Additional Ingredients

## Material Tests

The materials, surface coatings and soot should not pose harm to health and the environment. Materials concerned include the Lead and heavy metal content of dyes, lacquers, surface coatings, embedded materials, wick and the wax of the candle itself.

Performance and material tests are also performed on candle holders, lanterns and containers to ensure they are stable and safe in product design.

## Labelling Assessments

There should be appropriate information on labels or packaging with caution statements, safety advice and product use information to prevent potential misuse and dangers.

Through our quality testing, assessments and inspection services, you can ensure the quality, safety, and product designs of different home products, and protect the interest and safety of consumers.

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