

# EN 12546-1

## From Thermal Performance to Material Safety

Does Your Thermal Bottle Truly Deliver? Recent studies show that only 50% of tested thermal mugs reach a 4-star rating or above, and heat retention averages 30%.

In a competitive market, performance claims are everything. Ensure your brand stands out through **verified quality** and **certified safety**.

Hohenstein Hong Kong Laboratory, is fully accredited in compliance with ISO/IEC 17025:2017 by DAkkS and IAS, provides a full range of safety and quality testing to ensure your products meet international standards and exceed market expectations.

## Testing Capabilities Overview

### Thermal Insulation

- **Thermal Retention & Seal Integrity Analysis:**  
This technical assessment goes beyond simple temperature readings, we specifically analyze thermal loss at the closure points. By identifying heat transfer through lids and gaskets, we provide manufacturers with critical data to optimize seal materials and structural design, ensuring the product meets its advertised performance claims.
- **Cold Retention Verification:**  
Crucial for the "Outdoor" segment. We measure the vessel's ability to maintain temperatures below 10°C over extended durations, ensuring your "24-hour cold" claims are scientifically backed.

## Safety Scope

- **Leakage Tightness:**  
Vessels are inverted and subjected to specific pressure cycles to ensure no liquid escape, crucial for consumer safety and "bag-safe" marketing.
- **Impact & Drop Resistance:**  
Testing the structural integrity of the vacuum seal and outer casing after multiple falls from standardized heights onto hard surfaces.
- **Closure Durability:**  
Repetitive opening/closing cycles (up to 1,000+ times) to simulate years of use, ensuring the torque remains consistent and the seal does not degrade.
- **Material Safety (LFGB/FDA) :**  
Chemical analysis of liners, coatings, and plastics to ensure zero migration of harmful substances into beverages.

## Hohenstein Quality Label

Promote your proven quality directly on the product and across your sales channels—a credible tool to differentiate your range.

## Our Advantage

- ✓ **Market Fulfillment:** Meet all regulatory requirements for global entry.
- ✓ **Claim Verification:** Scientifically prove your performance claims.
- ✓ **Brand Trust:** Enhance reputation with our 80-year legacy.



## Get Your Thermal Bottle Testing Plan

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