



**For almost all packaging, tests are planned under accelerated stress conditions to simulate (in a shorter time) everything that could happen to a product during its life cycle.**

Normally, samples are evaluated at predetermined time intervals to have more data on the behavior of the product. These tests provide information on the expected shelf-life of the product and any storage conditions indicated on the label.

### **Packaging on the test bench**

The specific requirements for these conditions will depend on the specific packaging materials and products being tested, as well as the specific environmental conditions that are being simulated.

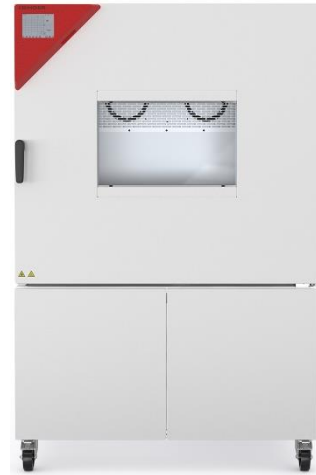
Some packaging materials and products may be more sensitive to changes in temperature and may require the climatic chamber to be able to maintain a consistent temperature within a narrow range. In other cases, the packaging may be more sensitive to changes in humidity and may require the climatic chamber to be able to maintain a consistent level of humidity. Similarly, some packaging may be sensitive to light exposure and may require the climatic chamber to be able to control the levels of light within the chamber.

In order to ensure the maximum quality of packaging materials for dairy products (as a nice example) extensive tests are carried out in climatic chambers under dynamic conditions and with rapid temperature changes. The laboratory works according to special standards such as DIN 10955 Sensory testing - Testing of packaging materials and packaging for foodstuffs or DIN EN 1230 Paper and board intended to come into contact with foodstuffs - Sensory analysis - Part 1: Odor and Part 2: Flavor transfer.

BINDER environmental simulation chambers MK series are the number one for dynamic temperature profiles. Heat and cold tests alike can be performed with precision within these climate chambers. Designed for rapid temperature changes, the environmental simulation chambers can be used within a temperature range of between -40°C and +180°C. As a result, the MK is a clever alternative to complex individual solutions for cyclical temperature tests.

P.S. The perfect environment – now available for simulation in additional sizes!

Where previously you had to carefully weigh up whether to opt for the smaller (240 l.) or larger (720 l.) version of the MK and MKF series, the 400 l. size option means there is now an ideal middle ground. And if you're looking to work with even larger volumes, you'll certainly get your money's worth with the 1020 l.!



### Product Information

Precision, reliability and versatility characterize our chambers for material testing in a wide temperature range up to 180 °C and fluctuations of  $\pm 0,3$  K.

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### Options & Accessories

Our documentation supports equipment, qualification and validation, thereby helping to reduce time and effort onsite.

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### Service & Individual

Best service for your success, including customized solutions for individual requirements complement our offering.

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