

HET-CAM

(Hen's Egg Test on the Chorioallantoic Membrane – exclusion of chemical irritation)

Objective

The irritating effect of materials is quantitatively determined on the basis of membrane alterations on the mucous membrane of a hen's egg. The test thus allows the assessment of a risk potential for skin irritation. This is recorded as a sum parameter. The test is not an analysis of individual substances.



Your benefit as a customer

- Product optimization
- Consumer safety
- Minimization of complaints

The test is particularly suitable for

- Medical devices and materials that are in contact with mucous membranes
- Textiles for sensitive persons such as allergy sufferers, pregnant women, small children, sick and elderly people
- Cosmetic, wellness and functional textiles as well as textiles with nano treatment
- Cosmetics and water-soluble chemicals or textiles that may enter the eye, e.g. through abrasion and linting

Marketing Instruments – Labels and Certificates

On passing the test the product may be awarded the certificate “Biological Safety”.

Description

The HET-CAM according to DB-ALM Method Summary n° 96 is a recognized alternative to the animal test on the rabbit eye (Draize Test) and is accredited at Hohenstein Laboratories by DAkkS. A prerequisite for performing the HET-CAM is passing the cytotoxicity test. For the test, an extract of the sample material is prepared and placed on the chorionallantoic membrane (CAM) of incubated hen's eggs for a few minutes. Certain textiles or even creams/ointments/solutions can be applied directly to the CAM. The strength of three different reaction types of CAM (coagulation, hemorrhage, and lysis of blood vessels) is determined by the end-point method under stereo magnifier. As a result, three degrees of irritation can be recorded (no or slight, moderate and strong irritation).

Test sample requirements

General

- Technical prerequisite: samples have to pass the cytotoxicity test
- If dyes, auxiliaries or additives are used in different quantities, always select the articles with the highest quantity (worst case)
- In the case of ready-made samples, send the complete product
- Test samples must be packed individually, e.g. in plastic bags, to avoid contamination during transport
- Please indicate adequate names and specific denotations of the sample (composition of material, article number, etc.)

Quantity of material

- At least 40 g of the test sample or size of A3, respectively

Duration of testing

- 10-15 working days after passing the cytotoxicity test
- Please note that despite a relatively short execution time, the test may take some time due to the supply of hatching egg