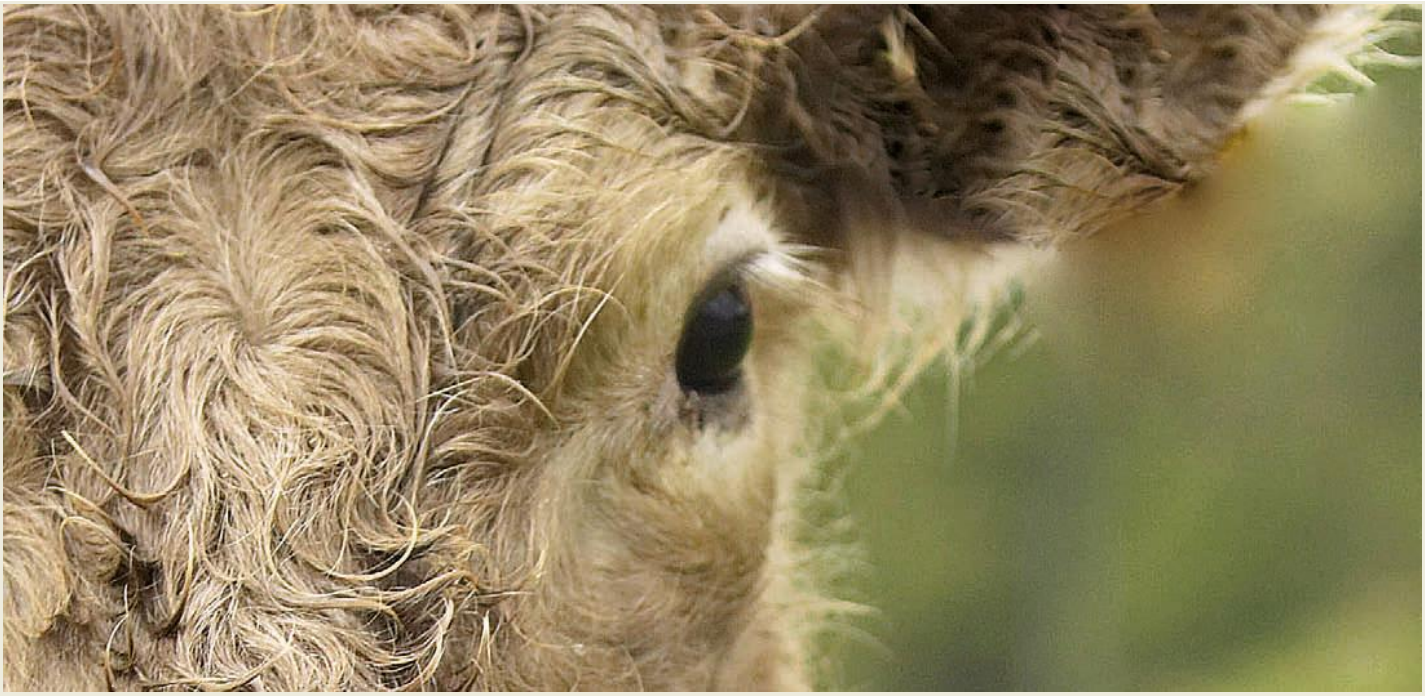
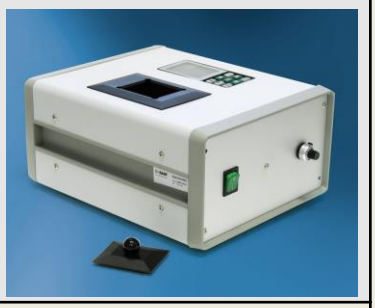


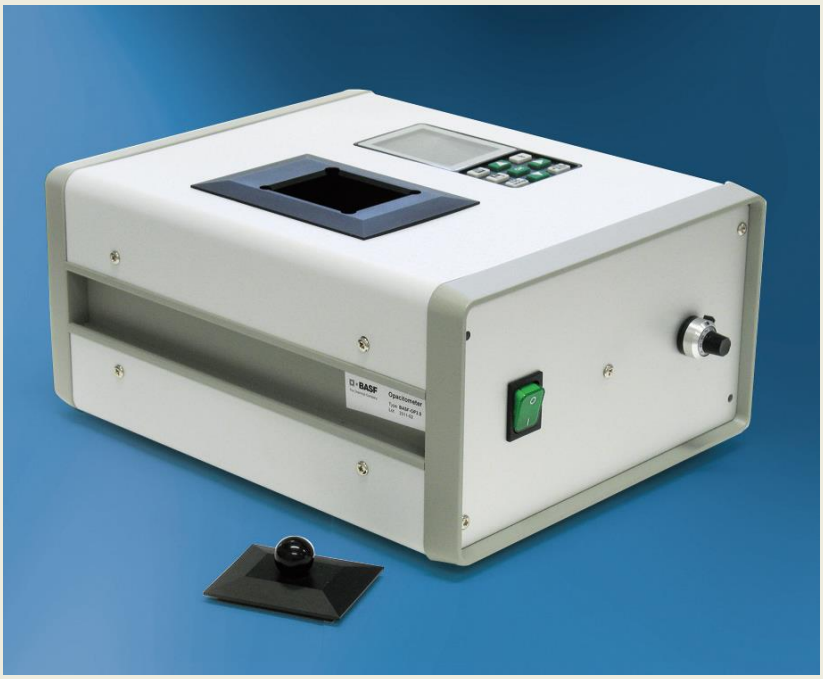
Equipment for
OECD Test guideline 437
to determine eye irritation *in vitro* (BCOP)



Chemical hazard identification includes the assessment of eye irritation potential. As of September 2009, the OECD permits *in vitro* tests with isolated bovine cornea to be used as a replacement of *in vivo* tests on rabbit eyes.

During the in-house validation of the BCOP assay, BASF discovered that it was difficult to commercially obtain reliable state-of-the-art equipment. Therefore BASF redefined the state-of-the-art by designing and optimizing the instrumentation for BCOP evaluation. The BCOP Opacitometer Kit offers a solution, including standardized equipment calibrated by certified glass filters, to generate reproducible and comparable results across laboratories. Since the adoption of OECD TG 437, many labs have recognized the value of our opacitometer kit and have requested it to ensure the quality of their data.

2013 BASF transferred the Opacitometer business to DURATEC Analysentechnik GmbH.



Equipment for OECD test guideline 437

to determine eye irritation *in vitro* (BCOP)

BCOP ASSAY

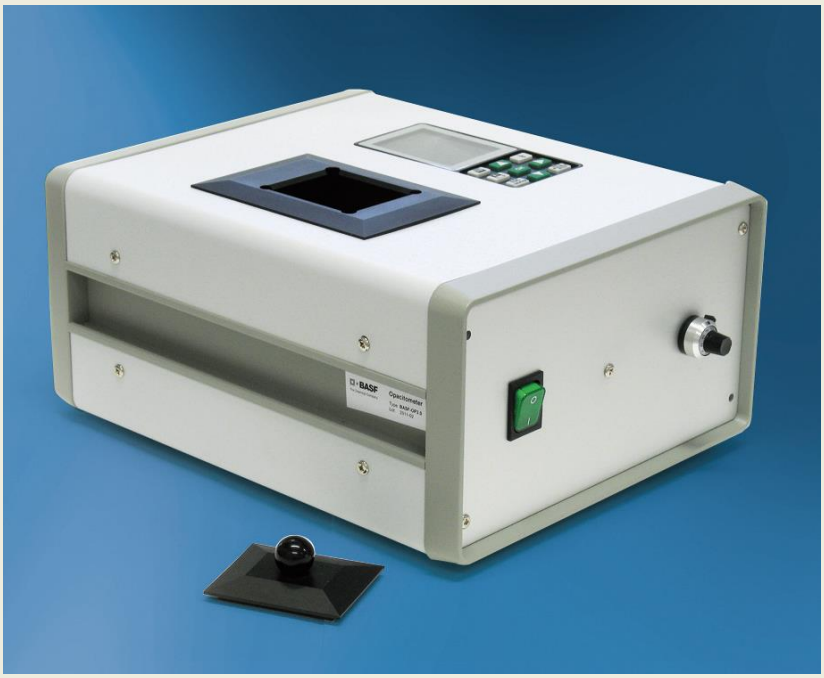
The OECD test guidline 437 describes the BCOP (Bonvine Corneal Opacity and Permeability) test as an in vitro method, that can be used to classify substances as "ocular corrosives and severe irritants" as classified as GHS Category 1, thereby reducing and refining the number of in vivo Rabbit Eye Irritation tests.

OPACITOMETER

The Opacitometer OP3.0 is used in the BCOP test method to measure „corneal opacity". The opacity of a cornea is measured by the diminution of light from a halogen lamp passing through the cornea. The light is measuerd as illuminance (unit: lux) by a certified light meter.

DURATEC
Analysentechnik GmbH

OPACIOMETER KIT OP3.0



Equipment for OECD test guideline 437

to determine eye irritation *in vitro* (BCOP)

PC INTERFACE

Our PC interface provides the appropriate software to facilitate data collection and processing and eliminate typing errors. The Opacometer can also be used without a PC.

GLASS FILTERS FOR CALIBRATION

Our kit provides **standard certified glass filters** and a **filter holder** designed to position filters identically to corneas between the halogen light source and the photocell. Glass filters, with their stable, well-defined and certified light absorption properties, are superior to plastic filters. In line with the OECD TG 437, the system ensures linear and accurate readings.

CORNEA HOLDERS

A set of 30 **cornea holders**, built in accordance to OECD TG 437, enables the parallel testing of up to 8 test substances including negative and positive controls with 3 corneas per group. The anterior and posterior chambers of each cornea holder can be opened with the ting opening tool provided, allowing substance application, open chamber cornea rinsing and the cleaning of component parts.

Specifications

Opacitometer OP3.0:

One-compartment/one-beam system in a robust metal casing with heavy-duty, easily-accessible cell-holder, light-adjustment and PC-interface.

Light Source:	Xenon halogen lamp 3.5V
Luminometer:	testo 545
Sensor Type:	photo diode (lux)
Effective range:	0-3200 lux
Resolution:	1 lux

Net an gross weight per Opacitometer-Kit: 17.8 kg / 18 net, 15.2 kg gross
Dimensions per Opacitometer-Kit: 550x350x220mm / 700x460x380mm

Certified Glass Filters:

1x filter holder (Peek)
3 x certified glass filters

Filter	Absorbance =OD	Opacity (I0/I)
F2/NG11	0.25	1.77
F3/NG5	0.5	3.13
F4/NG4	1.0	10

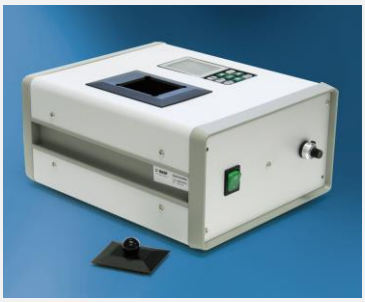
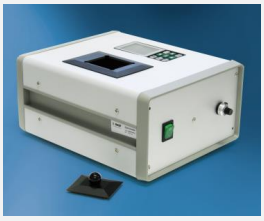
Cornea holders:

30x cornea holders (Peek) in line with the OECD guidline 437

Each holder includes 2 glasses, 3 O rings, 4 screws (3 for fixing, 1 hanger), but no plugs/rubber caps, as an alternative adhesive tape can be used.

1x specialized window-locking ring screwdriver to open the anterior and posterior chamber.

Order Numbers

926500   	**Opacitometer OP3.0 Kit (device, power supply cable, international plug adapter, PC connection, software, manuals, transport case); 30x Cornea Holder; 1x Filter Holder; 1x Standard-Filter-Set (NG11;NG5; NG4;Dark); Screw driver (for window locking ring)**
926500-001 	**Opacitometer OP3.0 (device, power supply cable, international plug adapter, PC connection, software, manuals, transport case)**
926500-002 	**Cornea Holder for Opacitometer OP3.0**
926500-003 	**Filter Holder for Opacitometer OP3.0**
926500-004 	**Standard Filter Set for Opacitometer OP3.0 (NG11;NG5; NG4;Dark)**