

PHOTOREACTOR WITH FORCED LIQUID CIRCULATION

GENERAL

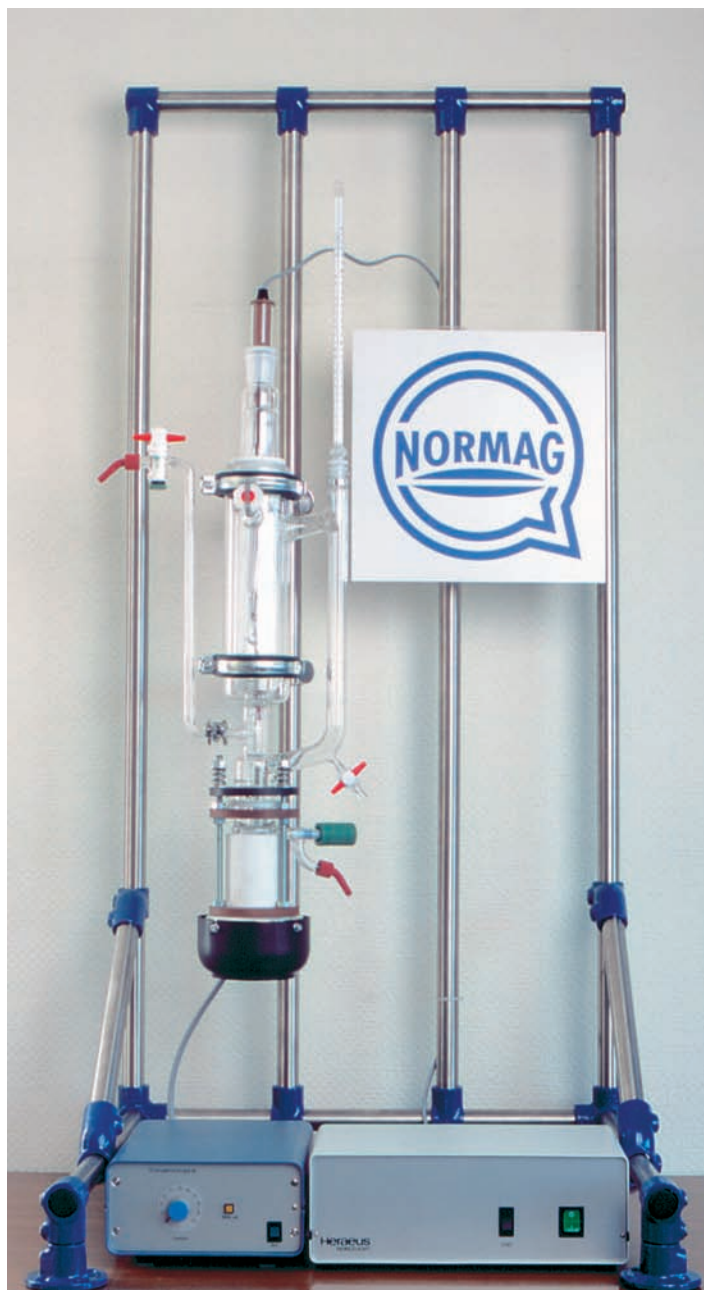
The synthesis via the photo chemistry is a commonly applied method. Organic syntheses often succeed only due to the radiation with UV-light or will be speeded up. Photochemical reactions are often run at room temperature and so they are gentler than other thermal processes. Photoreactors have a wide range of application, e.g. in synthesis, analysis and waste water treatment.

Construction of the Photoreactor

The radiation vessel is the main component of the reactor. It has a capacity of approx. 350 - 400 ml. Cooling tube and immersion tube, both made of quartz glass, are located in the radiation vessel. The circulation of the liquid is effected by the forced circulation pump "System Normag", which is controlled by a control unit. A thermometer for temperature range from 0 °C - 150 °C is part of delivery as well as small pieces.

Catalogue No. SAA 09316

Pict.
Photoreactor
with forced liquid circulation



The Normag Photoreactor offers the following advantages:

- An effective circulation of the liquid to be radiated inside the reactor.
- Only a small liquid volume is necessary.
- Used materials Borosilicate glass 3.3, quartz glass and plastic parts of PTFE.
- This photoreactor is suitable for the mercury low pressure lamp TNN 15/32 and for the mercury medium pressure lamps TQ 150, TQ 150 Z1, TQ 150 Z2 and TQ 150 Z3.

Accessory for the Photoreactor:

- Mercury low pressure lamp TNN 15/32
Capacity 15 W,
Lamp voltage 55 V

Catalogue No. SAA 09370
- Power unit fitting for TNN 15/32, connecting voltage
230 V, 50 Hz

Catalogue No. SAA 09371
- Mercury medium pressure lamp TQ 150
Capacity 150 W
Lamp voltage 85 V

Catalogue No. SAA 09360
- Mercury medium pressure lamp TQ 150 Z1
With additional radiation intensity 400 - 450 nm

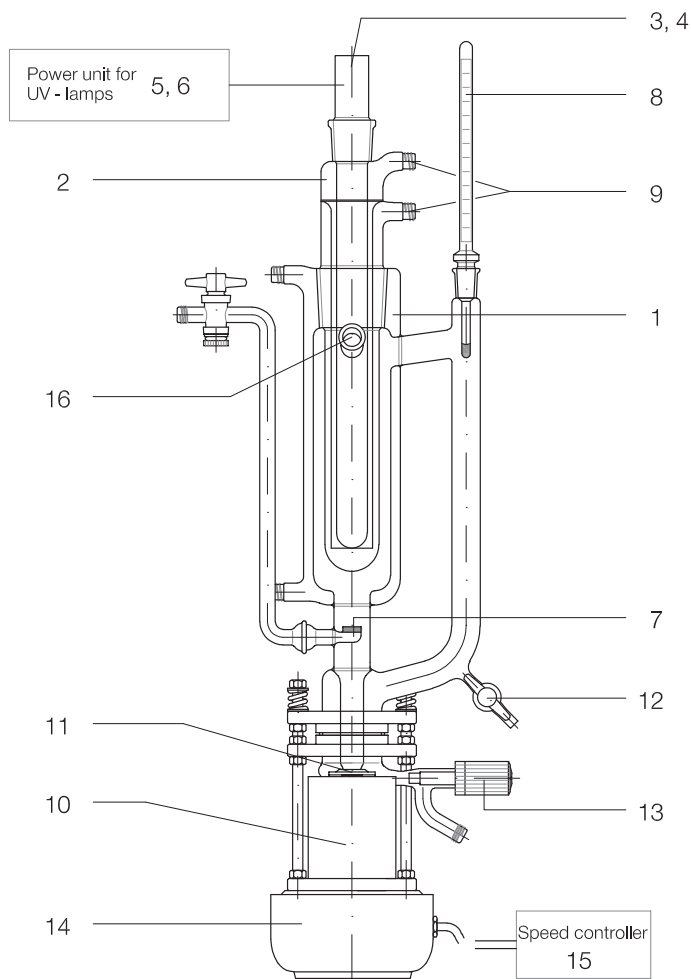
Catalogue No. SAA 09361
- Mercury medium pressure lamp TQ 150 Z2
With additional radiation intensity 500 - 550 nm

Catalogue No. SAA 09362
- Mercury medium pressure lamp TQ 150 Z3
With additional radiation intensity 280 - 360 nm
and 460 - 510 nm

Catalogue No. SAA 09363
- Power unit fitting for TQ 150, TQ 150 Z1, TQ 150 Z2
and TQ 150 Z3 lamps
Connecting voltage 220 V, 50 Hz

Catalogue No. SAA 09364
- Table tripod frame for the mounting of the
photoreactor, made of V4A tube, outer diameter
26.9 mm with powder-coated tube connectors,
Dimensions: W 800 x D 550 x H 1080 mm

Catalogue No. SAA 09385



Legend:

- 1 - Radiation vessel
- 2 - Cooling tube, quartz glass
- 3 - Mercury medium pressure lamp TQ150
- 4 - Mercury medium pressure lamp TNN 15/32
- 5, 6 - Power unit
- 7 - Gassing frit
- 8 - Thermometer
- 9 - Cooling water connections GL 14
- 10 - Forced liquid pump
- 11 - Pump impeller
- 12 - Glass stopcock
- 13 - Spindle valve for drain off
- 14 - Motor
- 15 - Speed regulation device
- 16 - Ventilating and feeding connection

We will be pleased to submit you our detailed offer.