

## LABC Drying Gun

The proven sample dryer for analysis substances and synthesis products utilises heat, drying agent and vacuum at the same time to produce optimal results.

Its temperature range can be controlled between + 30 °C to + 160 °C where it features a temperature consistency of  $\pm$  1 °C.

Both parts of the two-part drying vessel are made from glass:

1) Drying tube with AØ of 44 mm, inside length approx. 200 mm up to the ground section/NS 45 2) Flask with ground joint with stopcock for connection to a vacuum pump

The drying gun must be mounted to the laboratory tripod with the tripod rod screwed in place.

Dimensions (without mount for tripod and flask): H120 mm x W195 mm x D185 mm Weight: approx. 2 kg



## **Quick-start operating instructions**

**1 Setup:** Mount the drying gun to the tripod. Connect the drying gun with the power cable (1) to a grounded outlet with 230 VAC.

**2 Switch-on:** The drying gun is started by operating the rocker switch (3). The LED (6) lights "red" (heater: *On*); the colour changes to "green" when the target temperature has been reached (heater: *Off*)

3 The Actual Temperature is shown in the display (7) in °C.

**4 Setting the target temperature:** The desired target temperature can be set with the rotary knob while keeping the control button (5) depressed. The display (7) shows the value in °C.

**5 Target temperature control:** Press the control button (5). The display (7) now shows the target value in °C.

**Malfunctions:** LED (6) does not light or nothing shows on the display (7): Check the fuse (2), rating = 230 V, 1 AT (5  $\emptyset$  x 20). If the fuse is working well, the thermal protection in the device has responded. A case for the LABC Service



Item No.	Description
712020	LABC drying gun, complete with glass set, glass tube AØ 34 mm, Heated length approx. 150 mm, total length of tube: 200 mm to ground section
712020-GLAS	Glass set for drying gun
Accessories	
712021	Boat from Duranglas, L 60 x W 10 x H 8 mm
712022	Boat from Duranglas, L 78 x W 8 x H 8 mm
712221	Boat from hard porcelain, L 90 x W 12 x H 8 mm, glazed
712222	Boat from hard porcelain, L 100 x W 12 x H 10 mm, glazed
Drying agent	
4511424.0001	Silica gel within indicator, dry beads, orange VPE = 1 litre
10375	Aluminium oxide, water-free ultra-pure VPE = 250 g / 1 kg / 2.5 kg
120940	Magnesium sulphate, 99% ultra-pure DAC, VPE = 1 kg / 2.5 kg / 5 kg
A2418,0500	di-Phosphorous pentoxide ultra-pure, VPE = 500 g
A2418,1000	di-Phosphorous pentoxide ultra-pure, VPE = 1 kg
100543-0500	Sicapent® (di-Phosphorous pentoxide on inorganic carrier), VPE = 500 ml
100543-2800	Sicapent® (di-Phosphorous pentoxide on inorganic carrier), VPE = 2.8 litres

The liquids are absorbed by drying agent and bound chemically or physically. Some drying agents are also suitable to remove traces of acid or bases

Silica gel – universal drying agent for liquids and gasses.

Aluminium oxide  $(Al_2O_3)$  – suitable for removing water from ethers as well as aromatic, halogenated, aliphatic and olefin hydrocarbons. Not suitable for aldehydes, esters, epoxies and ketones.

**Magnesium sulphate (MgSO<sub>4</sub>)** – for drying almost all compounds, organic acids, nitrils, ketones, esters and aldehydes.

**di-Phosphorous pentoxide** ( $P_4O_{10}$ ) – effective drying agent to remove water steam from gases. Suitable for drying saturated aliphatic, halogenated and aromatic hydrocarbons, nitrils and carbon disulfide. Not suitable for alcohols, ethers, acids, amines and ketones.

**Sicapent**® - especially suitable for drying liquids and fast-flowing gases in drying tubes. Does not become sticky when absorbing moisture; the grainy consistency is preserved.