

Auto-Ignition Temperature of Solids - Grewer Method (semi-automatic)

79/831/EWG, VDI 2263

Product group(s): Flash Point

User group(s): Chemicals, Food, Paint, Paint Binders, Pharmaceuticals, Plastics, Polishes

Scope: Auto-ignition is the process which causes the ignition of a dust layer, after self-heating of dust that is surrounded by a heat source and air, is called auto-ignition.

The oxidizing self-heating depends upon the sample size and the duration of the temperature exposure. Increased sample volume will result in auto-ignition at lower surrounding temperatures.

- max. 5 simultaneous tests and 1 blindtest
- 2 parameter (setpoint and heating rate 2 ° C/min)
- overheat protection



Auto-Ignition Temperature Test Equipment

to be composed of:

- Semi-Automatic Auto-Ignition Tester, Grewer Method
- Screen Registration Unit

Technical Data

<u>Temperature range:</u>	ambient to +400 °C (+752 °F)
<u>Ignition:</u>	auto-ignition
<u>Dimensions (W x D x H):</u>	156 x 156 x 525 mm
<u>Weight:</u>	approx. 11 kg

Main Unit

12-1840

Semi-Automatic Auto-Ignition Tester, Grewer Method

VDI 2263 (in analogy to 79/831/EWG)

Consisting of:

two-partite aluminum-block controlled by Pt-100 temperature probe with 6 test wells to receive sample baskets. Heater 1.000 W with programmable controller including ramps up to 2 °C / min up to max. +400 °C. Holder for thermocouple (Ni-CrNi) with holder for wire-baskets. Tube inlet for compressed air to test in air-stream (air flow to be controlled manually). Test wells are having opening at the bottom to allow air circulation.

Supplied with:

- 10 baskets
- 3 thermocouples

Note:

Alternatively a screen registration unit (25-0325) may be connected. The recorder is not included in delivery.

Power supply: 230 V, 50/60 Hz

25-0325

Screen Registration Unit with (offline) PC Software

6 analog ports for either thermocouples for simultaneous recording and depict on the built-in 5"-STN-flatscreen, 3 relay-ports are programmable by the user. Files can be stored with 3.5"-diskdrive (1.44 MB) and shown on PC with the program, resistance-thermometers, 4 binary-ports, interface RS232/RS485.

Technical Data:

Data sets : for ca. 650.000 data sets
Flash-Memory : for ca. 350.000 data sets
Internal Reading-Rate : 250 ms
min. Memory-Cycle : 1 sec.

Power supply : 115/230 V, 50/60 Hz

Spare Parts

12-0870

Baskets for testing solids (cube)

made of metal, pack of 10

12-0872

Thermocouple for solids (NiCr-Ni)

Order Guideline

Minimum equipment: 1x 12-1480 + 1x 25-0325
Spares (approx. 1 year): 3x 12-0870, 3x 12-0872
Additional requirements: