

## temp-gard *basic* Operation



← USB Port 1  
← USB Port 2

Temperature Probe    Connections

**OK** ↵

Select function  
Start/Stop measurement

**ESC**

Always one step backwards

**Up/Down** ▲ ▼

Navigation

**USB Port 1**

Transfer via USB stick

**USB Port 2**

Transfer via cable

### Quick start with temp-gard logger

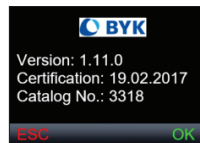
- Probe connection and positioning at the product
- Define measurement parameters in the „Setup“ menu
- Start measurement with „Start/Stop“ in the „Main Menu“
- LED flashes → logger is active

Temperature data will be saved based on trigger and interval settings.

The switched on temp-gard logger displays:

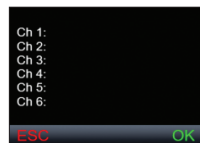
#### Instrument information

- Firmware version
- Date of last certification
- Catalog number of logger



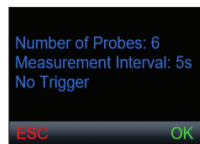
#### Ch x: Sensor names

- Helps to attach the probes at the object
- Press **OK** to continue



#### Measurement parameters

- Currently set parameters
- Number of probes
- Sampling rate
- Start trigger



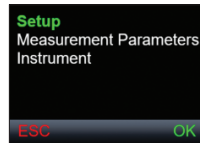
#### Main Menu

- Start/Stop measurement
- Display of temperature curves
- Displays the actual temperature data of the connected probes
- Definition measurement and instrument parameters



#### Setup

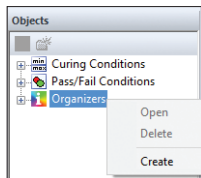
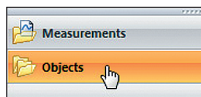
- Change measurement parameters or instrument settings
- Measurement parameters: number of probes, measurement time, trigger, measuring interval, temperature unit (°C/°F)
- Instrument: switch-off time, time/date, select language, info (serial no. – version )



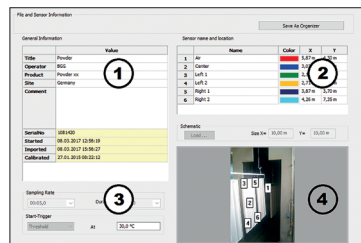
## Setup via temp-chart software

### How to create an Organizer?

With Organizers the measurement parameters as well as the name and position of the probes are defined.



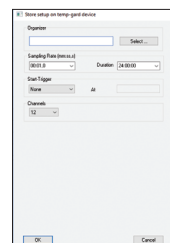
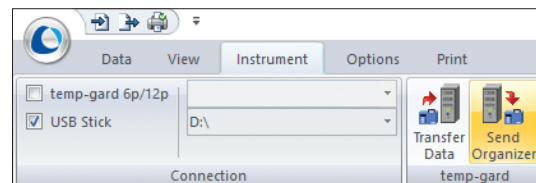
- Select "Objects" in the bottom left corner
- Right click on "Organizer" afterwards click on "Create"
- A blank organizer template will appear



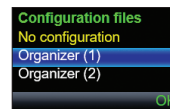
- 1: General information
- 2: Sensor names
- 3: Measurement parameters: interval, duration, trigger
- 4: Load schematic: add bmp or jpg file Drag the sensor numbers from the upper left corner in the desired position.

### How to transfer an Organizer to the temp-gard logger?

- Connect USB stick to computer (or connect the logger via cable)
- Select menu "Instrument"
- Set check mark on "USB Stick"
- Choose drive
- Select "Send Organizer"

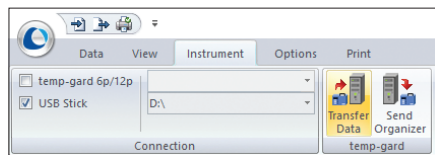


- Press "Select" to choose the desired organizer
- Transfer the organizer with "OK"
- Switch on the temp-gard logger
- Connect USB stick
- USB stick will be detected automatically
- Navigate to the desired organizer and press **OK**

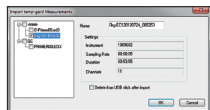


## Data transfer to temp-chart

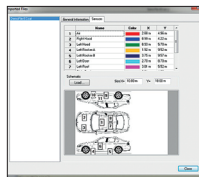
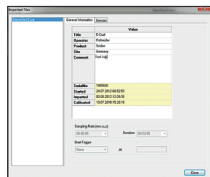
- Switch on the temp-gard logger
- Connect USB stick to temp-gard
- Data will be saved automatically on the USB stick
- Connect USB stick to PC
- Select menu "Instrument" in temp-chart
- Select "USB Stick"
- Select "Transfer Data"



- Select file to be transferred

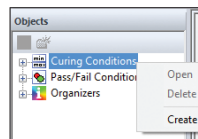
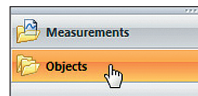


- Modify general info if necessary and load schematic

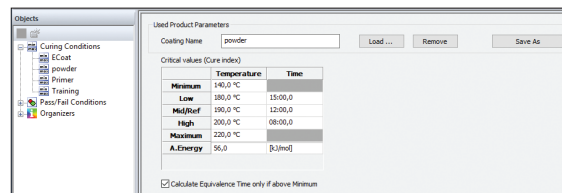


## How to set Curing Conditions?

The temperature and time conditions recommended by the paint maker will be compared to the actual measurement curve.



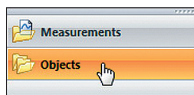
- Select "Objects" in the bottom left corner
- Right click on "Curing Conditions" followed by "Create"
- A blank template will appear
- Set temperature and time conditions
- Finalize by pressing "Save"



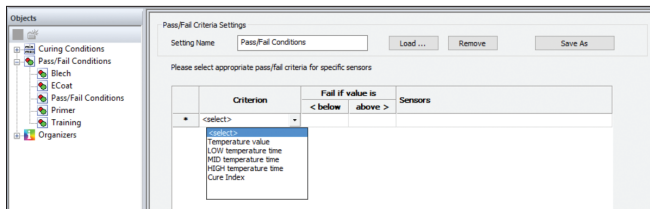
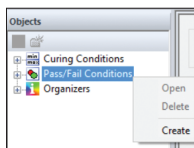
"Critical Values" and "Cure Index" will be calculated based on these curing conditions. By using the check box "Calculate Equivalence Time only if above Minimum", you can exclude temperature values below the minimum temperature from the calculation.

- Select "Measurements" in the bottom left corner
- Double click on the desired measurement in the database
- Go to "Curing Conditions" in the bottom center
- Load the created curing conditions

## How to set Pass/Fail Conditions?



- Select "Objects" in the bottom left corner
- Right click on "Pass/Fail Conditions" followed by "Create"
- Empty Pass/Fail template will appear
- Click on the arrow down and choose criterion
- Add "Fail if" data



- Select "Measurements" in the bottom left corner
- Double click on the desired measurement in the database
- Go to "Pass/Fail Conditions" in the bottom center
- Load conditions

Pass/Fail results are shown as:



- Red/green dots (traffic light) in database listing
- Red marked values in analysis tables
- Table "Pass/Fail Result"

## temp-gard *basic* Technical Specifications

|                   |                                                                   |
|-------------------|-------------------------------------------------------------------|
| No. of Channels   | 6                                                                 |
| Accuracy          | +/- 0.5 °C                                                        |
| Resolution        | 0.1 °C from 0 – 400 °C                                            |
| Sampling Interval | 0.1 sec up to 24 hrs                                              |
| Battery Capacity  | 0.5 sec interval = 50 hrs                                         |
| Display           | Color, 79 x 60 mm                                                 |
| Interface         | USB 2.0                                                           |
| Thermal Barrier   | 270 x 215 x 140 mm                                                |
| Weight            | 4.3 kg                                                            |
| Maximum Duration  | at 100 °C – 8.5 hrs<br>at 200 °C – 2.5 hrs<br>at 250 °C – 2.0 hrs |

## temp-chart *lite* System Requirements

|                    |                            |
|--------------------|----------------------------|
| Operating System   | Windows 7 or higher        |
| Memory             | min. 1 GB RAM              |
| Hard Disk Capacity | min. 100 MB                |
| Monitor Resolution | XGA (1024 x 768) or higher |
| Interface          | USB port                   |

## temp-chart *lite* Installation

|                                                                                                              |
|--------------------------------------------------------------------------------------------------------------|
| Download <b>temp-chart <i>lite</i></b> at <a href="http://www.byk.com/temp-chart">www.byk.com/temp-chart</a> |
| During installation, full administrator rights are necessary                                                 |
| Password to extract the installation file: <b>BYK!in5truments</b>                                            |