

**This short manual is no replacement of the MINIFLASH operation manual or ASTM standards!
Please read the operation manual first to ensure complete functionality of the instrument.**

GETTING STARTED

The keys on the front panel have the following functions:

- STOP / ESCAPEStop measurement at any time / Escape a menu
- RUNStart measurement
- TASK / ENTERExecute a selected operation / Enter a value or name
- SHIFTExecute special functions
- ▲ and ▼Modify characters
- ◀▶Change the cursor position

Place the MINIFLASH on a bench top with unobstructed air-flow to the rear side and from the right-hand side of the instrument.

Switch on the instrument with the power switch above the power connector.

The display of the instrument is now illuminated and shows the main menu:

```
*****
CCA-FLP    Vers. 4.26    24/07/2006 16:02
*Measure   *Printer     *Setup
*****
```

The instrument is now ready to use.

SETUP OF THE MINIFLASH

CHANGING THE TEMPERATURE SCALE

1. Shift the cursor to *Setup and press TASK.
2. Move the cursor to *unit and press TASK again.
3. Set the cursor on [C] and select the unit with the ▲ and ▼ keys.
Possible scales are: C (degrees Celsius)
Ccorr (degrees Celsius, correlated)
F (degrees Fahrenheit)
Fcorr (degrees Fahrenheit, correlated)
4. Press TASK on ← to leave the Setup menu.

SAMPLE IDENTIFICATION

In the main menu, shift the cursor to *Measure and press TASK.

Move the cursor to *ANISOL and press TASK again. The menu for name editing appears:

```
*****
← prog:1 ANISOL      (← # ANISOL  )
 *OK  No.: 1( 0)    T=  OFF :  0.0 % gn
*****
```

The sample identifier after, e.g. **ANISOL**, is set by placing the cursor over a character and changing it with the ▲ and ▼ keys. Pressing RUN together with ▲ or ▼ advances in steps of 10 characters.

MEASURING ACCORDING TO MCCCCFP METHOD (ASTM D7094)

Use a 7ml test cup with 2 ml sample and the stirring magnet for this test procedure.

1. In the main menu shift the cursor to ***Measure** and press **TASK** to select this method with the **▲** and **▼** keys on **↕** in the second line of the display.

```
*****
< *↕_ S No:1 *ANISOL      Ti= 25 Tf= 60 C
↕ D7094                  Toven= 24.3 C
*****
```

2. Select the Initial Temperature **Ti** and Final Temperature **Tf** as in accordance with ASTM standard D7094: **Ti** has to be at least 18 °C below the expected or actual flashpoint.
3. Move the cursor to **Tf** and set the *Final Temperature* above the expected flash point temperature.
4. When the oven temperature has reached **Ti**, the display changes to:

```
*****
*↕_ S      ANISOL          Toven= 25.0 C
fill sample, press RUN    Tsample= 24.9 C
*****
```

The sample to be tested has to be cooled below **Ti**. **Toven** indicates the actual *Oven Temperature*.

5. Fill the cooled sample into the sample cup and place the cup in its holder.
6. Press **RUN** to initiate the measurement process.
7. When MINIFLASH detects the flash point temperature of the sample, the result will be displayed:

```
*****
*↕- END ANISOL          Toven= 40.2 C
cooling      Tflash = 43.0 C
*****
```

The oven is actively cooled down to the starting temperature.

Press **STOP** to get back to the main menu and start with the next sample.

The oven temperature remains at **Ti** and MINIFLASH is ready for the next measurement.

MEASURING ACCORDING TO ASTM D6450

Use a 4ml test cup with 1ml sample and the stirring magnet for this test procedure.

1. In the main menu shift the cursor to ***Measure** and press **TASK** to select this method with the **▲** and **▼** keys on **↕** in the second line of the display.

```
*****
< *↕_ S No:1 *ANISOL      Ti= 25 Tf= 60 C
↕ D6450                  Toven= 24.3 C
*****
```

2. Continue with Point 2 of the D7094 method.