FUEL CONTROL

(Required Fuel and Lubricant)

Reference Fuel

Preamble

The fuel used for the control will be E5 Gasoline (SP 98), Standard EN 228, taken from the service station designated by the organizers for supplying competitors.

Recommendations

The fuel taken from the station (minimum 5L) will be stored in the container provided for this purpose.
It will be kept at ambient temperature throughout the meeting and will be used as a reference for the fuel control.
(Temperature closest to the fuel contained in the kart tanks)

In-Tank Control

Preamble

The purpose of this control is to compare the dielectric properties of the fuel and the fuel/oil mixture to determine if they are within the permitted limits.

The calibration and testing of the device are based on:

• Appendix 6 of the FIA/CIK regulations (Fuel, Mixtures and Lubricants)
Chapter 6.2 (Dielectric Test)

• The instructions provided by the fuel tester manufacturer (Digatron)

Recommendations

Before performing any checks:

 For the device

o Ensure that the device is in good working order
o Visually check the sensor and its connection
o When turning on the device,

o If "LO BAT" is displayed in the upper left corner of the screen, the batteries must be replaced
o Do not use the device if "LO BAT" is displayed; the measurement may be inaccurate

 For the fuel

o The dielectric characteristics of fuel change with temperature. It is therefore important that the reference fuel be stored at the same temperature as the fuel in the tanks

o Ensure that the temperatures of the reference fuel and the fuel to be tested in the tanks are less than 3°C apart

Calibrating the device

- Turn on the device and allow it to warm up for at least 15 minutes before performing any checks

o This will allow the internal components to stabilize at their operating temperature.

- Attach the probe to the device. Hold the probe wire and immerse the sensor in the reference mixture, previously poured into a clean, suitable container (glass or plastic) so that the sensor is completely submerged.

o Be careful not to let the sensor come into contact with the container.

o Gently shake the sensor to expel any air bubbles that may be trapped between the sensor plates and thus distort the measurement.

- Calibrate the device to **"0"** (see device instructions).

- Remove the sensor from the liquid and blow out the liquid between the plates.

✓ **The device is calibrated and operational.**
✓

Dielectric Test

Preamble

The purpose of this test is to compare the dielectric properties of the fuel and the fuel/oil mixture to determine if they are within the permissible limits.

In-tank checks

 Immerse the sensor in the tank until it is completely submerged.

 Gently shake the sensor up and down to remove any air bubbles that may be trapped between the sensor plates and thus distort the measurement.

o Be careful that the sensor does not come into contact with the walls, especially the bottom, of the tank.

 Read the result on the display.

- ✓ If the reading **does not exceed + or - 20 points** from the calibration value **"0",** the fuel is **compliant**.

During a meeting, it is **imperative** to calibrate the device before **any check.**