Density measurement of nitromethane at breakneck speed with DMA 35 Ex Petrol is a roaring success

Relevant for: Racing teams

Nowadays more and more racing teams go for DMA 35 Ex Petrol when it comes to the rapid measurement of the fuel concentration before the start of a race.

1 Nitromethane in racing

Nitromethane is the major constituent of the fuel for top fuel drag racing; the other ingredient is largely methanol. The requirements on the composition of the fuel mixture may vary.

The fuel composition must be measured prior to each race and adapted to the respective conditions such as ambient temperature and humidity, and also to the motor. Failure to ensure the correct composition of the fuel might result in severe damage to the motor with the risk that the race might be over before it even began. In the worst case, the driver might also be exposed to danger.

2 The fastest one wins

Checks on the fuel composition are always carried out immediately before the race starts. The portable density meter DMA 35 Ex Petrol by Anton Paar (**Figure 1**) measures the density of the fuel and, provided that an additional customer function is installed, displays the result in %w/w nitromethane or methanol.

It takes only 2 mL of sample and less than one minute to obtain an accurate measurement result of the fuel's composition.

- Certification: Intrinsically safe (EX marking II 2 G Ex ib IIB T4) for operation in areas with a high explosion hazard.
- Memory: Saves up to 1024 measuring results, wireless data transfer to a printer or PC is possible at any time.
- Durability: Not sensitive to nitromethane, methanol and similar substances.

3 Always handy

The portable DMA 35 Ex Petrol density meter weighs as little as 660 g and can therefore be carried around effortlessly to be at hand wherever and whenever needed.

4 DMA 35 Ex Petrol for sure!

On account of its EX marking II 2 G Ex ib IIB T4, DMA 35 Ex Petrol is ideally suited for accurate concentration measurements of fuels on-site and in areas with a high explosion hazard.

Figure 1: The portable DMA 35 Ex Petrol density meter