

IN THE NEWS



2.2l direct injection **Opel Signum**: in a fatigue test, the ADAC engineers filled up this vehicle with E 10 although not E 10 compatible



The pump (silver device) leaks: externally, the damage is invisible

E 10 Can Kill Engines

Until recently it was not clear whether E 10 fuels can actually harm engines that are not E 10 compatible. An ADAC Test has now demonstrated that E 10 does affect incompatible materials

What happens to a car when you fill it up with E 10 although it is not compatible? In March 2011, the ADAC test engineers started a fatigue test with an Opel Signum 2.2 Direct, which Opel had correctly indexed as E 10 incompatible. Still it was filled up on nothing but the new biofuel mix. After 27,000 kilometres on the road, the tester smelled a heavy whiff of petrol. An ADAC road patrol was dispatched and diagnosed a leak in the high-pressure injection pump, which could have caused a car fire. The engineers removed the defective pump and had it analysed under an electron microscope and by x-ray spectroscopy. They found that corrosion had punctured the cast light metal wall, which is up to 7 millimetres strong, allowing fuel to leak under high pressure. This proves that the higher ethanol concentration in E 10 can harm incompatible materials indexed by the manufacturers. ADAC has no intention to foment panic: we would like to mention that there is no evidence at all that this problem might affect E 10 compatible vehicles. ADAC will continue to study the effect of E 10.