

Test 3

Oil filter (diesel)



Tests carried out


1. Test of physical properties
 - 1.1 Burst resistance as per DEKRA requirement
 - 1.2 Filter surface as per DEKRA requirement
 - 1.3 Bubble point as per DIN ISO 2942
 - 1.4 Lasting deformation as per PV 3307
 - 1.5 Pull test with breakage force in relation to width as per DIN ISO 1924-2
 - 1.6 Strength test as per NBR VW 2.8.1
 - 1.7 Collapse/burst pressure test in relation to width as per DIN ISO 2941
2. Material compatibility as per DEKRA environmental work instruction
3. Visual check of workmanship
4. Heavy metals as per end-of-vehicle directive

Products tested

Oil filters for diesel engines

1. Volkswagen Genuine oil filter
item number 068 115 561 B
2. KFI oil filter
item number W940/25

Test institute

DEKRA Umwelt GmbH  DEKRA
Laboratory for environmental and product analysis, Stuttgart

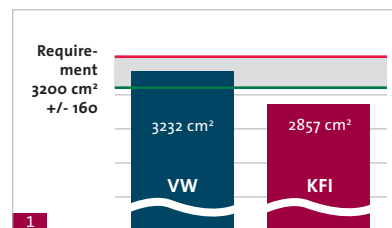
Test period

27th July 2005 to
16th September 2005

The best engine oil cannot fulfil its role in reducing wear, and thereby performance loss, if it is not cleaned effectively on a continual basis. Oil filters clean circulating oil of dust, metallic abrasion, oil carbons, soot particles, etc. so that only clean oil makes its way to the lubrication points and bearings.

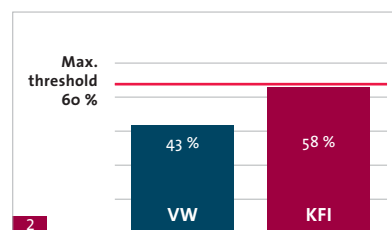
Summary and evaluation of test results

For all tests concerning the physical properties, apart from the strength test, the figures for the KFI oil filter were poorer than those of the Volkswagen Genuine oil filter.



Filter performance

In particular, the filter surface of the KFI filter, which is decisive for the actual cleaning potential, is considerably less than the surface of the Volkswagen Genuine oil filter for diesel engines (fig. 1). This figure does not meet the requirements of DEKRA.



Lasting deformation

The KFI filter was also close to the maximum threshold according to test regulation PV 3307 (fig. 2) after 22 hour hot air storage to check lasting deformation.

The figure from the KFI filter in this test criterion is just under the maximum permissible threshold according to test regulation 3307. Leaks can occur in the event of lasting deformation above 60 %.



For the material compatibility test both parts tested showed no change.

Result

The KFI oil filter violates in one test criterion a DEKRA requirement. This product is therefore not a comparable part with regards to quality according to the service partner contract. The KFI product tested is thus not the same in terms of quality.