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OIL COMPATIBILITY TESTING Q8 HOLBEIN NWG 46

1 BACKGROUND

Oil compatibility requested by JCB as they notified Gates Europe NV of their intention to use Q8 Holbein 46.

After sending out a purchase request for this oil, Q8 notified us this grade will be discontinued and replaced by Q8 Holbein NWG 46.

This was communicated to JCB and Gates has now tested the new grade.

2 RESULTS

Tests were carried out according to ISO 1817 / BS903 – A16 with S1 dumbbells.
Ageing conditions: 70 hours at 100°C.

Volume swell and change in physical properties were measured (hardness, modulus at 100%, tensile strength at break, elongation at break).

Based on these results and in comparison to known reference and commercial oils, following conclusions can be drawn.

JCB208 / JCB210 – hose type

High volume swell might indicate oil permeation through the hose wall in time (sweating might occur). This should not be worse than with a HEES type of oil.

Physical rubber properties remain at an acceptable level so no detrimental hose failure should be expected.

G4K / G5K / G6K – wire spiral hose

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Physical rubber properties remain at an acceptable level so no detrimental hose failure should be expected.

CBM2T06 / CJ404 / MegaSys range – wire braided hoses

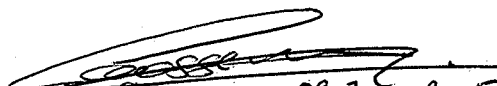
No issues to be expected. Volume swell and rubber property changes are insignificant.

EFG4K / EFG5K / EFG6K – EnviroFluid wire spiral hose

No issues to be expected. Volume swell and rubber property changes are insignificant.

BC2A

No issues to be expected. Oil was discoloured after the test, indicating a possible exchange of components between the rubber and the oil. Volume swell and rubber property changes are insignificant.


Jan Goossens 09. June 2005
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