

ENVIROPEEL TEST REPORT

Author: Barry Windsor

Testing Enviropeel 170 for resistance to a range of chemicals

All in Liquid Form

Test Period

Approximately 6 months

Test Conditions

Individual corked test tubes filled to a depth of 60/70% with liquid.
Average ambient test temperature 15 ° C Stored indoors.

Test Control Coated nails with no test liquid in a sealed tube.

Caveat

NB: Enviropeel 170 is primarily an anti-corrosion coating. As it possesses significant water resistance (hydrophobicity) it will resist some chemicals, especially those in aqueous solution.

Enviropeel 170 is not designed to be a chemical resistant coating but should perform reasonably well in conditions of limited immersion, splashes, vapour contact.

Please read the test data and the conclusions drawn.

ENVIROPEEL TESTING TEST PERIOD = 6 months

TEST LIQUID	E170 (white)
20% SULPHURIC ACID	☑ NOT AFFECTED
20% HYDROCHLORIC ACID	☑ NOT AFFECTED
20% ACETIC ACID	? BLISTERED SLIGHT SOFTENING
20% PHOSPHORIC ORTHO	☑ NOT AFFECTED
20% ACETIC ACID	? SLIGHT SOFTENING
TAP WATER	☑ NOT AFFECTED
DISTILLED/ DEMIN. WATER	☑ NOT AFFECTED
SYNTHETIC SEA WATER	? SLIGHT SOFTENING
20% SODIUM HYDROXIDE	☑ NOT AFFECTED
20% SODIUM HYPOCHLORITE	? SLIGHT SURFACE ATTACK
20% AMMONIUM HYDROXIDE	☑ NOT AFFECTED
WHITE SPIRIT	? SLIGHT SOFTENING
XYLENE	☒ DISSOLVED
METHANOL	☒ DISSOLVED
ETHANOL	☒ DISSOLVED
DIESEL OIL	☑ NOT AFFECTED
PETROL/GASOLINE	☒ EXTREMELY SOFT, SWELLED
METHYL ISO-BUTYL KETONE	☒ DISSOLVED
BUTYL ACETATE	☒ DISSOLVED
AIR-CONTROL	☑ "OILY" SURFACE INDENTS.

☑ = suitable ? = needs to be tested case by case ☒ = unsuitable

Conclusions

1. The Enviropeel coated objects must be continuous and pinhole free.
2. Acids: satisfactory with 20% sulphuric acid, 20% hydrochloric, 20% phosphoric but more affected by 20% nitric and 20% acetic.
3. Water: satisfactory (not for potable water contact)
4. Alkalis: satisfactory with 20% sodium hydroxide and 20% sodium hypochlorite (bleach) some reaction with ammonium hydroxide.
5. Solvents: generally unsuitable.
6. Resistant to diesel but not petrol/gasoline.
7. Short-term test only - longer testing period may be required for a longer-term prognosis
8. Potential permutations involved with chemical testing including type, concentration, temperature, duration, type of contact etc. If in doubt please consult Technical Services for further assistance.

Enviropeel Holdings LLC

1128 South West Street, Indianapolis, Indiana 46225, USA
 Tel: +1 317 631-9100 Email: info@enviropeel-holdings.com