



PERFORMANCE REPORT

HMG ACRYTHANE XSC.



TEST PROCEDURES

Tests performed to relevant ISO/BS/ASTM Test Method.

GLOSS LEVEL

The initial gloss level was recorded at 96 using a 60-degree geometry glossmeter as ASTM D523.

ADHESION

A crosshatch adhesion to ASTM D3359 was performed. No lifting or flaking was evident. (BS3900 Part E6)

HARDNESS

A pencil hardness test was performed on the panel, as per ASTM D3363. The minimum required result of a 'H' reading was surpassed.

WATER-RESISTANCE

A panel was immersed in distilled water for 100 hours and held at 20°C. No wrinkling or blistering was evident on the film

GASOLINE RESISTANCE

No wrinkling or blistering was evident after immersion in a mixture of 2 parts unleaded automotive gasoline and 1 part mineral spirits. The duration of the test was 24 hours at 20°C temperature.

DIESEL FUEL RESISTANCE

No blistering or wrinkling was evident after 24 hours immersion in diesel fuel kept at a constant 20°C, as per ASTM D975 no2-0

HOT OIL RESISTANCE

No wrinkling or blistering was evident after immersion in straight mineral oil (SAE30 Grade) for a duration of 24 hours held at 80°C

HUMIDITY RESISTANCE

Cyclic humidity was performed on the panel, no blistering, rusting, wrinkling, loss of adhesion or chalking was evident.

SALT SPRAY RESISTANCE

No deterioration of the film was evident after 1000 hours exposure, as per ASTM B117.

ARTIFICIAL WEATHERING RESISTANCE

a) Colour Shift

Exposure of 2000 hours.

No change

b) Adhesion

No loss of adhesion or intercoat adhesion was evident.

SYNTHETIC SILEAGE SOLUTION

After 72 hours immersion in 5% Propionic Acid no effects were observed.

ALKALI RESISTANCE

After 24 hours immersion in a solution comprising of equal parts of 2% Sodium Hydroxide solution and 2% Ammonium Hydroxide solution no adverse effects were observed.

SYNTHETIC FERTILISER IMMERSION TEST

After 72 hours immersion in a solution comprising of equal parts of 5% Ammonium Phosphate solution and 5% Ammonium Nitrate solution no adverse effects were observed.

SYNTHETIC HAY PRESERVE SOLUTION

The panel was subjected to 72 hours immersion in a 1% aqueous solution of Sulphuric Acid, as per ASTM D714 (Blistering standard 8f) No peeling, lifting or colour change was observed.

SYNTHETIC FARMYARD MANURE SOLUTION

After 72 hours immersion in a mixture of equal parts of 5% solution of Sodium Chloride, Uric Acid, Ammonium Hydroxide and Urea, no film defects were evident.

FLEXIBILITY

The material showed no cracking or peeling beyond the 6mm diameter mark after bending around a 3mm conical mandrel, as per ASTM D522.

INDENTATION

A 900gm ball was used as per BS 3900 Part E7. No film defects were evident after repeating the procedure three times.

CONCLUSION

All panels tested achieve the required standard of the relevant test specification.