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REPORT TPV AGEING TESTS IN CHLORINATED WATER. TO DETERMINE SUITABILITY FOR USE IN SWIMMING POOL SURROUNDS.

INTRODUCTION

TPV has been subject to storage tests in chlorinated water. The water contained 10ppm of free chlorine, derived from a standard material used for the treatment of swimming pools. The TPV was tested both in its unbound state and bound with FX 1118 & FX 1255. The free granules were placed in with the glass bottles containing water @ 10 ppm free chlorine. Storage was at ambient temperatures 15c -23c, the glass bottles were not tinted. Storage was on an open lab bench under normal office lighting conditions.

The bound samples were cut into dumbbells with the BS EN 12203CL - CUTTER. storage was in opaque plastic tubs .the tensile strength and elongation were measured "wet "after 6 months and compared with the starting values for tensile and elongation . Samples were also placed in boiled tap water as a comparison. The loose TPV was examined by comparing the colour and surface texture to unaged materials.

Granules were placed in Petri dishes covered with water with 10ppm of free chlorine .the Petri dishes were placed in the bottom of the QUV for 2 weeks. In order to simulate a sunny Mediterranean climate.

RESULTS

- 1 .The measurement of the tensile strength and elongation showed negligible deterioration after 6 months.
2. Unbound granules which had been immersed in both chlorinated water and tap water showed no signs of the colour fading.
3. No evidence of microscopic surface changes was observed.
4. The granules irradiated with UV light in the presence of chlorinated water showed no mark changes were observed this test would simulate an outdoor tpv pool surround in a Mediterranean or Californian climate.

Conclusions

TPV is a suitable material for both indoor & outdoor pool surrounds.

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