FP 1398 FLAME RETARDANT POLYURETHANE FOAM IMPREGNANT

FP 1398 is a water based flame retardant foam impregnant. FP 1398 is used to manufacture flame retardant, acoustic/thermal insulating impregnated polyurethane foam. Foam impregnated with FP 1398 will meet the requirements UL94 V0 & 94-SV, BS 476 Part 5 and BS 476 Parts 6 and 7 Building Regulations Class "O".

PROPERTIES

Total Solids Content, %	58.0 - 62.0
Viscosity, centipoise	200 - 400
Specific Gravity	1.45 - 1.49
pH	8.0 - 9.0

APPLICATION

FP 1398 is applied by impregnation. Typically, a one metre wide continuous roll of slit polyurethane foam is fully immersed in a trough of FP 1398. Foam thicknesses can range from 6mm to 100mm. FP 1398 is available at 40% solids content for use on foams 12mm thick or less. The foam passes through a nip roller which is below the surface of the FP 1398. The saturated foam emerges from the impregnation trough and then passes through a second nip roller where excess material is removed. The gap in the second nip determines how much FP 1398 is applied to the foam. Non CMHR polyurethane foam will need a minimum of 400% by weight dry add-on of FP 1398 to achieve the required fire performance. As an example, a 20 Kg/m^3 foam with 400% dry add-on will have a finished density of 80 Kg/m^3.

The impregnated foam then passes through a drying oven at 140 - 160°C. Drying time will depend on temperature, air flow, running speed and foam thickness. Once the water has been driven off it is important that the dried film of FP 1398 is kept at ca. 150°C for 2 - 3 minutes to cross link the polymer binder to achieve optimum performance.

STORAGE AND HANDLING

FP 1398 should be stored in sealed containers between 5 and 30°C. Protect from frost. FP 1398 has a shelf life of 6 months when stored correctly.