COT MATTRESSES AND VISCOELASTIC FOAM

Members are reminded that a British Standard is in place for cot mattresses containing PU foam. BS I977: Part 10: 1997 is entitled “Domestic Bedding: Specification for mattresses and bumpers for children’s cots, perambulators and similar domestic articles.” Its scope concerns material requirements, dimensions, performance, marking and packaging. In the drafting of recommendations, special attention was given to precautions for the avoidance of suffocation and hence a firm foam (BS3379 hardness grade 100 minimum) is specified to avoid adverse indentation.

The standard does not address the existence of viscoelastic foams and their use or otherwise in cot mattresses. This is primarily for historical reasons, but we wish to offer advice on this matter in the light of commercial enquiries. Viscoelastic foams are marketed for their ability to conform to body contours, with associated claims around pressure relief and therapeutic properties. Such properties are now found advantageous in a range of applications, with both furniture items and adult mattresses increasingly engineered to include viscoelastic foams.

However the British Plastics Federation (BPF) advises that, in our opinion, the properties of viscoelastic foam may be incompatible with precautions required in the construction of cot mattresses and there may be potential dangers from indentation and consequent restriction of breathing. BPF emphasise that there is no evidence that any problems have been found with the use of viscoelastic foam in this application and that this is a purely precautionary note. However Members are encouraged not to recommend the use of viscoelastic foam for cot mattresses since the use of this material is unproven in this application and may give rise to product liability issues.

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