

Scope Of Test

The IMO Resolution MSC, 61(67) Annex 1, Part 2 (Ref.1) specifies that smoke generation test should be conducted in accordance with ISO 5659 Part 2 (Ref.2).

The Resolution also details a classification system based on the maximum specific optical density of smoke occurring during the test, averaged over three replicate tests, carried out in each of three test conditions.

In addition, the Resolution specifies limits for 7 toxic gases which must not be exceeded in any of the three test conditions.

Description Of Test Specimens

The description of the specimens given below has been prepared from information provided by the sponsor of the test. All values quoted are nominal, unless tolerances are given.

The product was "Dalsouple Micro Relief Micro-Pastille", a flame retardant grade, decorative, single layer, homogeneous rubber floor covering having a thickness of 2.5mm and a weight of 40kg/m² bonded with a two part adhesive (product reference "Mapei Adesilex G19") to one face of 12.5mm thick calcium silicate based board having an oven dry density of 875kg/m³.

Further details relating to the composition of the floor covering have been provided by the sponsor of the test and are held on our confidential file relating to this investigation.

The sponsor supplied the specimens of floor covering and the adhesive. Warrington Fire Research Centre was not involved in any selection or sampling procedure. Warrington Fire Research Centre supplied the calcium silicate based board and bonded the composite together.

Exposed Face

The decorative face of the specimens was exposed to the radiant heat of the furnace when the specimens were mounted in the test position.

Conditioning Of Specimens

The specimens were received on the 17th March 2003.

Prior to the tests, the specimens were conditioned to constant mass at a temperature of 23 ± 2°C and a relative humidity of 50 ± 5%.

Date Of Test

The tests were performed between the 26th March 2003 and the 7th April 2003.

Test Procedure

The tests were performed in accordance with the procedure specified in IMO Resolution MSC 61(67) Annex 1, Part 2 as amended by MSC/Circ.916 dated 4th June 1999, and it is advised that this report is read in conjunction with that document.

A 75mm x 75mm specimen was mounted horizontally inside a smoke chamber of the design specified in ISO 5659 Part 2, 25mm below a cone shaped, radiant electric heater capable of producing a uniform irradiance of 50kW/m² on the specimen surface. A premixed propane/air pilot flame of length 30mm may be applied 10mm above the specimen surface.

