FEICA The European voice of the adhesive and sealant industry

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TM 1014:2013

Determination of the Tack Free Time of an OCF[1] Canister Foam

1. Scope

This test method describes how to determine the tack free time of a liquid OCF.

2. Short description of the procedure

The liquid foam is dispensed in a string on a horizontal surface. After a certain time for curing, the surface of the string is touched with a small rod or tube. The tack free time is reached when the surface doesn't stick anymore.

3. Background and purpose

In general the tack free time is the time that adhesion on the surface has stopped.
The tack free time is subjected to temperature and humidity conditions. It is usually prolonged by lower temperature or / and lower humidity.

4. Equipment

- Paper or cardboard
- Small rod or tube made of PE (e.g. straw)
- Clock or stopwatch

5. Procedure

5.1 Preparation

a) Test conditions: 23 °C, 50 % r. h. (normal climate to DIN EN ISO 139). The test could also be performed under other conditions. The selected test conditions must be part of the report.
b) Bring the test canister to the test temperature for at least 24 h.

5.2 Experimental procedure

a) The can is shaken at least 20 times before application. The first approximately 100 g of foam is thrown away by spraying.
b) Cylindrically shaped beads with diameter of 20 to 30 mm are sprayed on the cardboard and the time is noted (t_0) or the stopwatch is started.
c) The surface of the bead is touched gently with the small rod/tube (without penetrating the skin) several times after applying the foam, e.g. every 30 sec (see figure 1).

[1] **OCF**: Generic for moisture curing One Component Foams dispensed from pressurised containers ("aerosol cans") as well as self-curing two component foams dispensed from pressurised containers ("1,5 component foams")

d) For every touch a clean part of the rod/tube shall be used. The time when no foam adheres to the rod is noted (**t_1**).
e) No calculation is needed when using a stopwatch. The result is expressed in minutes (min). If a normal clock is used, the calculation is as follows:

$$t_{tack\ free} = t_1 - t_0$$

Figure 1: a foam bead touched by a PE rod / tube

6. Revision

Version	Date	Remarks
1	October 2013	Released by OCF TTF meeting on 22 October 2013

7. Contact

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