Test samples for the vibration test of IBCs

Transmitted by European Plastics Converters (EuPC)

Introduction

1. The obligatory introduction of the vibration test for IBCs from 1st January 2011 led occasionally to the question if IBC test samples have to undergo chemical pre-storage in preparation of the vibration test.

Background

2. After the decision of the UN Sub-Committee to introduce the vibration test a clear position regarding the implementation was taken by the Joint Meeting in 6.5.6.3.5, third paragraph: “After this storage, the samples shall undergo the tests prescribed in 6.5.6.4 to 6.5.6.9”.

3. According to the description of the vibration test in 6.5.6.13, preliminary storage with standard liquids is not necessary. This is also justified for safety-related reasons, as in the opinion of several competent authorities and test houses preliminary storage has no effect on the result of the vibration test. The vibration test is intended to test the robustness of IBCs under extreme conditions, especially the linkage between the three components pallet, cage and inner receptacle. This is underlined by the fact that following footnote f, taken up in the table under 6.5.6.3.7 when the vibration test was introduced by the UN Sub-Committee, “another IBC of the same design type may be used for the vibration test”.

4. Consequently, if there is consensus that preliminary storage with standard liquids is not necessary for the vibration test, this should also be applicable for the preliminary storage with the original contained goods. Unfortunately the text in 6.5.6.3.3 is not clear regarding this detail: „To prove there is sufficient chemical compatibility with the contained goods, the sample IBC shall be subjected to a preliminary storage for 6 months, during which the samples shall remain filled with the substances they are intended to contain or with substances which are known to have at least as severe a stress-cracking, weakening or molecular degradation influence on the plastics materials in question, and after which the samples shall be submitted to the applicable tests listed in the table in 6.5.6.3.7.“

5. The table in 6.5.6.3.7 also provides the vibration test for IBCs. It could be concluded that preliminary storage with standard liquids is not necessary for the vibration test, only preliminary storage with the original contained goods.
Proposal

6. EuPC suggests to submit a proposal in biennium 2011/2012 for a more precise definition of 6.5.6.3.3. However, EuPC wishes to know the opinion of the Joint Meeting beforehand.