STATEMENT

Aerobic biodegradation under controlled composting conditions of M-49

On January 28, 2011 a controlled composting biodegradation test was initiated on M-49 on behalf of Mazzucchelli 1849 S.p.A. (Italy). The test was executed according to the international standard ISO 14855 Determination of the Ultimate Aerobic Biodegradability and Disintegration of Plastics under Controlled Composting Conditions (2005). All criteria for a valid test were fulfilled. The report on this study, with code RA-DDOM-1b, was published on Jun-22-2011.

In the meantime the international test method ISO 14855 (2005) has been revised to ISO 14855-1 Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions – Method by analysis of evolved carbon dioxide (2012), but the test procedure for biodegradation has remained identical and the results are still in line with the biodegradation requirements of EN 13432 Requirements for packaging recoverable through composting and biodegradation – Test scheme and evaluation criteria for the final acceptance of packaging (2000) and ISO 17088 Specifications for compostable plastics (2012).

M-49 reached an absolute biodegradation of 101.8%±10.2% (82.7% relative biodegradation compared to cellulose) after 115 days of testing and as such fulfills the 90% absolute biodegradation requirement within 180 days of testing as stipulated by EN 13432 (2000). In case the material does not contain organic constituents at levels between 1% to 10% also the biodegradation requirement of ISO 17088 (2012) is fulfilled. According to ISO 17088 (2012) these constituents shall be tested individually.

Gent, September 26th, 2018

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