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Date
March 2nd, 2010

Your ref.
Varenr. 56756

Our ref.
G00824/JH

Test report - Migration

Sample material

Identification	Overall migration of shovels into food simulants
Sample receipt	January 18th 2010
Number / type	1 sample identified as: Lab. No.: G00824, Medium Hand Scoop, 1 litre, Yellow, no. 56756
Analytical period	January 18 th – March 2 nd 2010

Applied methods

Method no.	Principle	Parameter	Limit of detection	Uncertainty ①
EN 1186-3	Gravimetric	Overall migration to 50% ethanol and 3% acetic acid using total immersion	1 mg/dm ²	10%
EN 1186-2	Gravimetric/FID	Overall migration to olive oil using total immersion	2 mg/dm ²	15% (RSD)

Principle for migration: The overall migration from the samples to 50% ethanol, 3% acetic acid and olive oil is determined after exposure to the simulants for 30 minutes at 80°C followed by 10 days at 40°C. The tests are performed by total immersion according to EN 1186-2 og EN 1186-3.

50% ethanol og 3% acetic acid: After exposure where the soluble components migrate from the sample to the simulant, the sample is removed from the simulant. The simulant is evaporated to dryness and the dry matter determined by weighing.

Olive oil: At the end of the test period, the sample was removed from the food simulant. The sample was weighed and extracted with pentane by means of Soxhlet extraction for 7 hours. The amount of extracted olive oil was determined by gaschromatography with flame ionisation detection (GC/FID). The loss of weight was adjusted the excessive oil extracted from the sample and the calculated loss equals the total migration.

All tests were carried out in triplicates.

① However, at least half of the limit of detection is absolute

Analytical results: please turn to the next page.

Test results

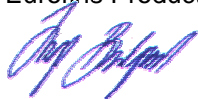
The threshold value for overall migration is 10 mg/dm² and the results show that the product tested **complies** with regulation 2002/72/EC as amended by 2004/1/EC, 2004/19/EC, 2005/79/EC, 2007/19/EC, 2008/39/EC and Regulation 975/2009/EC on plastic material and articles intended to come into contact with food for the above mentioned test conditions

Analytical results - overall migration

Unit: mg/dm²	G00824, Medium Hand Scoop, 1 litre, Yellow, no. 56756			
Simulant	1. determination	2. determination	3. determination	Average
50% Ethanol	<1	1,6	1,5	1,5
3% Acetic acid	<1	<1	<1	<1
Olive oil	3,5	3,9	2,9	3,5

< means less than

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Inge Bondgaard
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