Intertek Wilton

Test Report

European overall migration testing of sauce dispensers

Test Report : **IWTN/W000000889RL001**

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TEST REPORT

Report Number:	IWTN/W000000889RL001
Chit Number:	ITWI-00000010176
Receipt Date:	06/05/2014
Lab Book Reference:	
File Reference Location:	N110/112
Number of Samples:	3
Method Reference:	EN1186:1, 2 & 3

Samples Submitted

Intertek Sample Reference	Sample Description	Customer Identifier
IWTN/W000000889-1	Ketchup/mustard dispenser	406-AN/398-CN
IWTN/W000000889-2	bottles	136-1

Description of Work Required

European overall migration testing of:

- Ketchup/mustard dispenser (sample W889/1) into 10% v/v aqueous ethanol, 95% v/v aqueous ethanol and 3% w/v aqueous acetic acid, for 10 days at 40 °C.
- Sauce bottles (sample W889/2) into 10% v/v aqueous ethanol, 3% w/v aqueous acetic acid and olive oil, for 10 days at 40 °C.
- Metal spring components from sample W889/1 into 95% v/v aqueous ethanol, for 10 days at 40 °C.

Experimental

Samples were exposed according to test methods EN1186:1, 2 & 3 under conditions dictated by European Regulation EU No. 10/2011.

- Sample W889/1 was exposed as final article (minus metal spring components) to 1000 mL simulant by article fill.
- 2 dm^2 of sample W889/2 was exposed to 100 mL simulant by total immersion.
- Metal spring components from sample W889/1 were exposed as total components from one sample to 300 mL simulant by total immersion.

Exposures were performed in triplicate.
Following sample exposure, 100 mL aliquots of simulant were evaporated to dryness in order to determine residual weight.
Olive oil extracts were passed to GC for migration analysis.

Results, Interpretation and Opinions

Sauce dispenser sample W889/1:

Sample ID	Time/ Temperature	Simulant	Overall Migration mg/kg simulant	Mean Overall Migration	European Overall Migration Limit mg/kg simulant
IWTN/W889/1/ 406-AN/ 398-CN	10 days 40°C	10% v/v aq. ethanol	5.1	6.9	60
			7.7		
			8.0		
		95% v/v aq. ethanol	28.2	25.4	60
			23.8		
			24.2		
		3% w/v aq. acetic acid	4.2	4.83	60
			4.3		
			6.0		

Metal spring components from dispenser sample W889/1:

Sample ID	Time/ Temperature	Simulant	Overall Migration mg/kg simulant	Mean Overall Migration	European Overall Migration Limit mg/kg simulant
IWTN/W889/1/ SPRINGS	10 days 40°C	95% v/v aq. ethanol	9.1	5.4	60
			3.8		
			3.3		

Sauce bottle sample W889/2:

Sample ID	Time/ Temperature	Simulant	Overall Migration mg/kg simulant	Mean Overall Migration	European Overall Migration Limit mg/kg simulant
IWTN/W889/2/ 136-1	10 days 40°C	10% v/v aq. ethanol	4.1	6.5	60
			8.0		
			7.5		
		Olive oil	18.8	23.4	60
			17.8		
			18.6		
			15.6		
		3% w/v aq. acetic acid	71.8*	3.8	60
			5.9		
			1.7		

*Solvent contamination. Result not included in the mean result.

The calculated results have not taken the blanks into account.

- Aqueous food simulants: 10% v/v aqueous ethanol and 3% w/v aqueous acetic acid

The samples (IWTN/W889/1/ and /2/) supplied and tested against the European Regulation No 10/2011 overall migration of plastics into 10% v/v aqueous ethanol and 3% w/v aqueous acetic acid for 10 days at 40°C showed that migration does not exceed the 60 mg/kg limit specified.

Therefore, both samples are compliant with the regulations.

- Fat substitute: 95% v/v aqueous ethanol

The sample (IWTN/W889/1/) supplied and tested against the European Regulation No 10/2011 overall migration of plastics into 95% v/v aqueous ethanol for 10 days at 40°C showed that migration does not exceed the 60 mg/kg limit specified.
The sample was tested for storage of food for up to 6 months at room temperature. During exposure, the simulant level decreased by more than 10%, which is outside of the tolerances specified in the method. However, this reduction in volume of contents is deemed to shadow the intended usage as a dispenser, so the test conditions simulate actual use.

Therefore, this sample is compliant with the regulations.

- Fatty food simulant: olive oil

The sample (IWTN/W889/2/) supplied and tested against the European Regulation No 10/2011 overall migration of plastics into olive oil for 10 days at 40°C showed that migration does not exceed the 60 mg/kg limit specified once the fat reduction factor (FRF) has been applied.

Therefore, this sample is compliant with the regulations.

Report Authorisation

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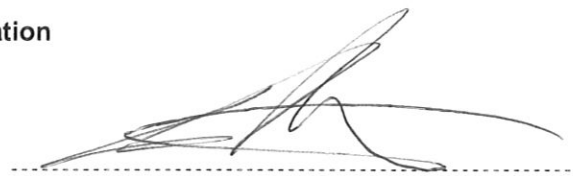

Date: 23/06/2014

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Regulatory
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Date: 23/06/2014

Intertek Wilton welcomes feedback on all aspects of the service provided to you. Please email any comments that you have to wilton.feedback@intertek.com