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Migration Report

08 January 2020

1 Sample Information

Sample name	Cardboard box
Sample reception	27/11/2019
Sample no.	392-2019-00499601
Analysis period	29/11/2019 - 03/01/2020

2 Brief Evaluation of the Results

Type of analysis	Conclusion	Regulation or protocol
Specific migration of mineral oil	Fail	German mineral oil ordinance (DRAFT - 4 th edition)

Full details based on the testing and direct comparison with limit values are available in the following pages



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3 Applied Test Methods

3.1 General Test References

Method	Parameter	Analysis principle	LOD	Um(%)
EN 1186-14:2002	Preparation for migration	Exposure to 95% ethanol by cell	-	-
Internal Method ¹	MOAH C ₁₆ -C ₃₅ (aromatic)	LC-GC-FID	0.1 mg/kg	-
Internal Method ¹	MOSH/POSH C ₂₀ -C ₃₅ (saturated)	LC-GC-FID	0.1 mg/kg	-

3.2 Test Conditions

Simulant	Technique	Area exposed [dm ²]	Volume (Simulant) [mL]	Migration Conditions
95% ethanol	Cell	2	100	10 Days at 40°C

4 Results

4.1 Specific Migration of Mineral Oil

Parameter	CAS No.	Food Simulant	Average [mg/kg]	SML value [mg/kg]
MOAH (aromatic hydrocarbons) C ₁₆ -C ₃₅	-	95% ethanol	0.94	0.5#
MOSH/POSH (saturated, longer ch.) C ₂₀ -C ₃₅	-	95% ethanol	4.2	-

German mineral oil ordinance (DRAFT - MOSH removed in 4th edition from March 2017)

5 Summary and Evaluation of the Results

The results for specific migration of mineral oil **exceeds** the limit value in German mineral oil ordinance (DRAFT - 4th edition) for the applied test conditions.

Please note that MOSH has been removed in the 4th edition of the draft from March 2017.

¹ Eurofins Consumer Product Testing GmbH : DIN EN ISO/IEC 17025:2005 D-PL-14435-01-00

*: Not accredited

<: Less than

>: Greater than

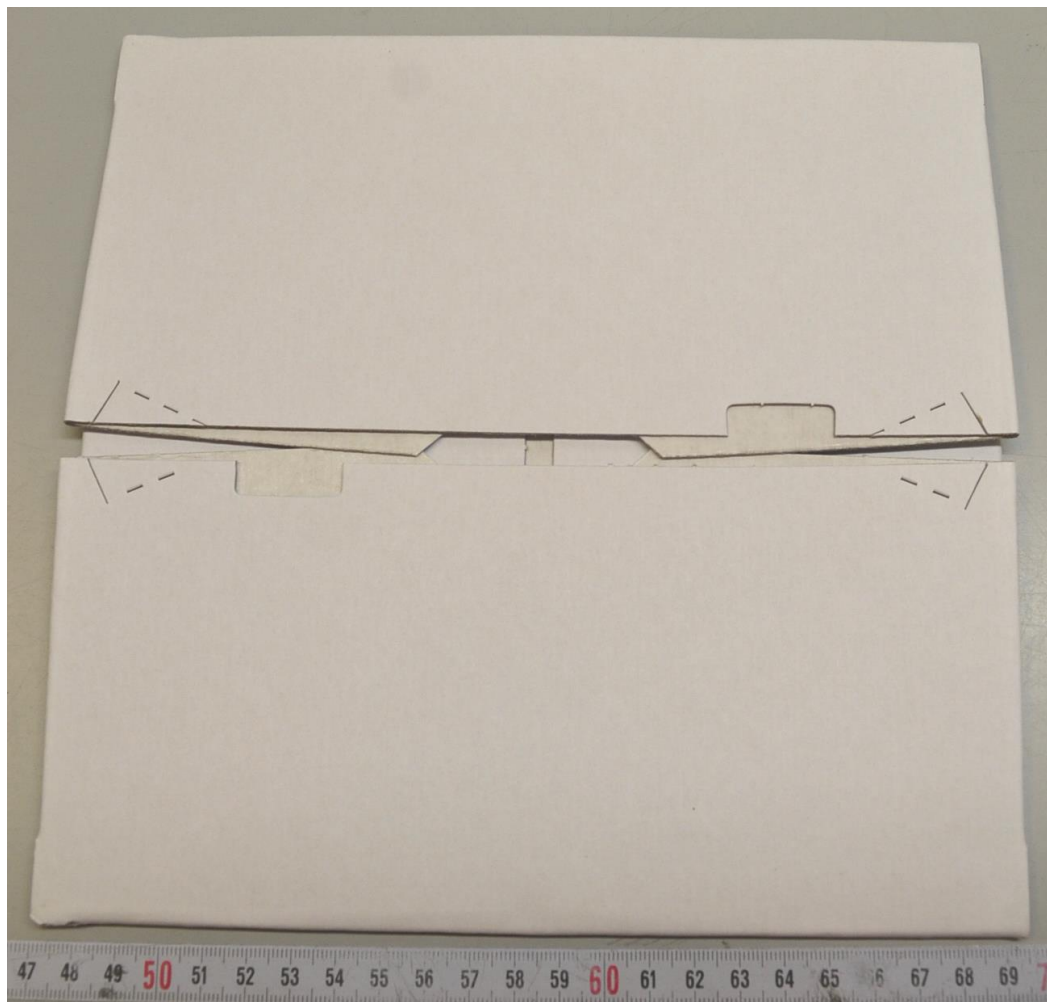
LOD: Limit of detection

Um(%): The expanded uncertainty Um(%) equals 2 x RSD%. For further information please visit www.eurofins.dk/uncertainty

The results are only valid for the tested sample(s).

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6 Picture of Sample



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⌘: Internal test method

n.d: Not detected

n.m: Not measurable

LOQ: Limit of quantification