

## Analysis Report #20556

Migration Test for Steraflex food  
Using commercial print images

### Reference

Customer:	TIEFR/AG3M
Contact:	Alexandre Saulnier
Analysis requested on:	08/Jul/2019
Samples received on:	02/Jul/2019
Report date:	26/Jul/2019
Toyo Ink Europe analyst:	Tom Vleminckx

### Sample description

Labeling:	Tube 1 – N°01 – No ink – No Varnish Tube 1 – N°02 – EXC5001-4MY – No Varnish Tube 2 – N°03 – EXC5001-4MY – No Varnish Tube 2 – N°04 – EXC54932MY + EXC54920MY – No Varnish
Tested printing ink:	EXC54001-4MY EXC54920MY EXC54932MY
Substrate:	Labels – applied on 50µm OPP and 12µm PET carrier substrate

### Aim of the test

The customer is printing using Flexo Food formulations from Toyo. However, for the moment only a small part of the print jobs are intended for food packaging. For that reason, a migration test was requested for Steraflex food printed samples to support the customer in expanding his food packaging business.

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### Test conditions

Migration Incubation Duration:	10 days <sup>(1)</sup>
Migration Incubation Temperature:	60 ± 1°C <sup>(1)</sup>
Migration Simulant:	95%EtOH <sup>(1)</sup>
Quantification method:	UPLC-MS operating in MRM mode

*(1) These test conditions cover all storage times at refrigerated and frozen conditions, and storage times of more than 6 months at room temperature for foodstuffs which contain free fats at the surface (EU No 10/2011). Migration tests were executed following BS EN 1186-:2002.*

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### Targeted Analytes

After the migration incubation we tested the simulants for migrating compounds exceeding 0.010 mg/kg. In total, we checked for the presence of 45 photoinitiators and acrylates.

### Results

#### Labels applied on 50µm OPP substrate

For all analysed photoinitiators and acrylates, the detected migration concentration was below 0.010 mg/kg<sup>(1)</sup> across all samples.

#### Labels applied on 12µm PET substrate

For all analysed photoinitiators and acrylates, the detected migration concentration was below 0.010 mg/kg<sup>(1)</sup> across all samples.

*(1) All results are in mg/kg, expressed as milligrams of migrating analyte over kilograms of foodstuff. Calculations were made using the standard surface-to-volume ratio of 6 dm<sup>2</sup> per kilogram foodstuff given in the EU regulation No 10/2011. The applied thresholds are given by the Swiss Ordinance (817.023.21, Annex X).*

### Conclusion

No photoinitiators or acrylates were detected to migrate above their migration threshold across all samples printed with Steraflex Food formulation.