Melamine and formaldehyde in melamine plastic products

SELECTED SAMPLES FROM THE NORWEGIAN MARKET IN 2021

Melamine and formaldehyde in melamine plastic products

This Report is prepared by Tommy Licht Cederberg and Lisbeth Krüger Jensen, Technical University of Denmark and Julie Tesdal Håland, Norwegian Food Safety Authority, December 2022.

Project leader Julie Tesdal Håland, Norwegian Food Safety Authority, Chemical Safety and EEA Section.

Laboratory: Technical University of Denmark, National Food Institute

Forsidefoto: Technical University of Denmark
Illustrasjonsfoto: Technical University of Denmark
Publisert på www.mattilsynet.no

Table of contents

Summary

Melamine plastic is a popular type of food contact material because the tableware is rather inexpensive, is durable and is produced in many colours and design. Residual monomers of melamine and formaldehyde may migrate out of the finished product into the foodstuffs. Specific migration limits for melamine and formaldehyde are in force by European Commission Regulation.

In total 30 samples of tableware were analysed. Migration tests found one non-compliance sample that exceeded the specific migration limit (SML). The sample was non-compliance with respect to melamine.

Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food has in 2020 been amended with Commission Regulation (EU) No. 1245/2020 setting new requirements for three subsequent migration tests for articles that are in repeated contact with food. The specific migration must not increase between the three migration tests and the stability of the material shall be established even if SML is not exceeded in any of the three tests.

An EU harmonised approach for the stability test is not yet published but if preliminary discussed procedures are used on the collected 30 articles, up to approximately two-thirds of them will not comply with the stability requirement.

Norsk sammendrag

Melaminplast er en populær type matkontaktmateriale fordi materialet er ganske billig, er holdbart og finnes gjerne i mange farger og design. Restmonomerer av melamin og formaldehyd kan migrere fra det ferdige produktet over i matvarene. Spesifikke migrasjonsgrenser for melamin og formaldehyd er underlagt EU-kommisjonens forordninger og regelverk.

Totalt ble 30 prøver av melaminserviser analysert. Ved å gjennomføre migrasjonstestester fant vi én prøve som ikke overholdt migrasjonsgrensen. Prøven var ikke i henhold til regelverket når det gjaldt melamin.

EU-forordning nr.10/2011 om plastmaterialer og artikler beregnet på å komme i kontakt med mat ble i 2020 endret med EU-forordning nr. 1245/2020 hvor det stilles nye krav til tre påfølgende

migrasjonstester for artikler som er i gjentatt kontakt med mat. Den spesifikke migrasjonen (SML) må ikke øke mellom de tre migrasjonstestene, og materialets stabilitet skal etableres selv om SML ikke overskrives i noen av de tre testene.

En felles harmonisert EU-tilnærming for stabilitetstesten er ennå ikke publisert, men hvis foreløpige diskuterte prosedyrer brukes på de 30 analyserte artiklene, vil opptil omtrent to tredjedeler av dem ikke oppfylle stabilitetskravet.

1 Preface

This investigation was performed in cooperation between Project Leader Julie Tesdal Håland, Norwegian Food Safety Authority, Chemical Safety and EEA Section and Senior Adviser Tommy Licht Cederberg and Laboratory Engineer Lisbeth Krüger Jensen, Technical University of Denmark (DTU), National Food Institute, Research Group for Analytical Food Chemistry.

The laboratory work on analysis of migration of melamine and formaldehyde from melamine plastic products was performed at DTU.

The report was prepared by Senior Adviser Tommy Licht Cederberg and Laboratory Engineer Lisbeth Krüger Jensen, DTU in cooperation with project Leader Julie Tesdal Håland, The Norwegian Food Safety Authority.

The DTU DOCX-number was 21/1030438 and the Norwegian Food Authority' ePhorte number was 2020/218370.

2 Background and aim of project

Melamine plastic is used for the manufacture of food contact materials for repeated use. The items do not break easily, are rather inexpensive and as they are produced in many colours, shapes, and designs, they have become popular tableware in many homes.

The resin is made from a reaction between the monomer's melamine and formaldehyde and the melamine products are made by thermal compression moulding after addition of pigment, fillers etc. From the finished product residues of unreacted monomers may migrate into foodstuffs.

The aim of the present project is to sample melamine tableware from the Norwegian market and test if migration of melamine and formaldehyde complies with the present regulation.

3 Regulation

European Commission Regulation No. 10/2011 on plastic materials and articles intended to come into contact with food applies to melamine plastic tableware. Specific migration limit (SML) has been set for melamine and formaldehyde. See Table 1.

Table 1. Specific migration limit (SML) laid down in Commission Regulation (EU) 10/2011

Substance	**Specific migration limit (SML) mg/kg food or food simulant**
Melamine	2.5
Formaldehyde	15

For articles intended to come into repeated contact with food migration test shall be carried out three times and compliance of SML shall be verified based on results from the third migration test.

Regulation (EU) 10/2011 has in 2020 been amended with Regulation (EU) 1245/2020 setting new requirements for three subsequent migration tests for articles that are in repeated contact with food. The specific migration in the second test shall not exceed the level observed in the first test, and the specific migration in the third test shall not exceed the level observed in the second test. The stability of the material shall be established even if SML is not exceeded in any of the three tests.

4 Materials and methods

4.1 Sampling

The melamine tableware was sampled between July 2, 2021, to September 2, 2021 and received at the Technical University of Denmark from September 28, 2021 to November 2, 2021.

Samples of melamine plastic tableware were collected at importers or at retail shops in Norway. Sampling was conducted in three Norwegian Food Safety Authority regions: “Greater-Oslo”, “East” and “South and West”. The food inspectors from the regions forwarded the samples to DTU with the accompanying documentation.

DTU received in total 30 samples. From the sample documentation and information on the packaging it could be observed all samples were made of melamine resin.

The number of tested samples and product types are shown in Table 2. Detailed sampling information is given in Annex B and pictures of the samples can be seen in Annex C.

Table 2. Types of melamine plastic tableware samples tested in the project.

FCM Sample type	Melamine resin
Cups	13
Bowls	6
Plates	4
Spoons	2
Spout cup	4
Tray	1
Total	**30**

4.2 Migration test conditions

The requirements for migration test of repeated use articles as given in Regulation *(EU) 10/2011* were followed. In the technical guidelines for testing of kitchenware it is stated that test with 3% acetic acid as food simulant represents the worst-case migration from melamine plastic (Simoneau, 2011).

For repeated use articles three successive migration tests must be carried out and the results from the last test are used for compliance check of SMLs. Results from all three tests are use for verification of stability of the material.

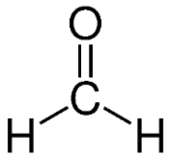
The samples were filled with simulant, 3% acetic acid, up to 0.5 cm from the rim. The simulant was preheated, and the items were covered and placed in an oven at 70°C for 2 hours.

4.3 Analysis of melamine and formaldehyde

An accredited analytical method developed at DTU, based on liquid chromatography tandem mass spectrometry (LC-MS/MS), were used for the analyses of melamine and formaldehyde.

The method FA479.1. “Determination of melamine, cyanuric acid and formaldehyde in food simulant 3% acetic acid by LC-MS/MS” determine the concentration of melamine and formaldehyde as well as cyanuric acid and hexamethylenetretramine (HMTA). HMTA is a precursor of formaldehyde and is commonly used in the production of melamine plastic. Analytically HMTA is converted to formaldehyde and is determined as such. Cyanuric acid is an impurity which can be formed during melamine production. In a previous project on melamine product cyanuric acid was not detected in the collected samples and HMTA did not add significantly to compliance verification so in the current project focus has been on melamine and formaldehyde only (Mattilsynet, 2020). In Figure 1 chemical structures of the analysed compounds are shown.

Figure 1. Names, chemical structures and information for compounds included in the analytical results.

 Melamine CAS 108-78-1 MW 126.123 $C_3H_6H_6$	 Formaldehyde CAS 50-00-0 MW 30.026 CH_2O

The method is based on the principles described in CEN standard 13130 covering materials and articles in contact with foodstuffs. Part 23 describes determination of formaldehyde and part 27 determination of melamine in food simulants.

LC-MS/MS parameters

LC-MS/MS is used for detection of the analytes as it is a sensitive and specific technique (DS/EN 16858:2017). Formaldehyde is detected after derivatization with acetyl acetone (DS/CEN/TS 13130-23:2005).

A Bruker EVOQ Elite LC-MS/MS instrument with ESI was used. In Annex A the LC-MS/MS instrumental parameters are shown.

For melamine and cyanuric acid, the column was a TSKgel Amide (250*2 mm, 5 µm). Eluent A: 10 mM ammonium acetate, eluent B: acetonitrile. Injection volume 2 µl, flow 0.35 ml/min, column temperature 30°C, gradient 0 min. 10% A, 9 min. 65% A, 11 min. 90% A, 12.5 min. 10% A to end at 22 min.

For formaldehyde the column was an Aquity UPLC BEH C18 (100*2.1 mm, 1.7µm). Eluent A: MilliQ water. Eluent B: Acetonitrile. Injection volume 2 µl, flow 0.2 ml/min, column temperature 30°C, gradient 0 min. 10% A, 5 min. 90% A, 6.1 min. 10% A to end at 9 min.

An analytical sequence included calibration solutions, procedure blank, spike addition sample in duplicate, reference material, samples.

Calibration standard solutions were used at 8 levels (0, 5, 10, 50, 100, 250, 500 and 1000 ng/ml).

Sample preparation

Melamine and cyanuric acid: 100 µl 3% acetic acid food simulant + 800 µl 3% acetic acid + 100 µl internal standard solution.

Formaldehyde: 50 µl 3% acetic acid food simulant + 250 µl internal standard solution + 500 µl acetyl acetone solution + 1.7 ml milliQ water. Derivatization is performed in water bath at 60°C for 10 min.

Detection limit, quantification limit and analytical uncertainty

The achieved quantification limits and analytical uncertainties of the analytical method are shown in Table 3.

Table 3. Quantification limit (LOQ) and expanded uncertainty.

Substance	LOQ (mg/kg food simulant)	Expanded uncertainty (%)
Melamine	0.25	12
Formaldehyde	1.5	9, 20*

*: Above 7.5 mg/kg

Presentation of results

To check compliance of specific migration limits the concentration of melamine and formaldehyde obtained after migration test should be converted to migration value in units of mg/kg food or food simulant (Regulation *(EU) 10/2011*).

For articles that are fillable and have a volume in the range of 500 ml and up to 10 litres or are (intended to be) in contact with food for infants and young children the actual surface to volume ratio is used.

For articles that have a volume below 500 ml or higher than 10 litres the results need to be corrected to a surface to volume ratio of 6 dm^2/kg of food.

Five of the collected samples were intended for infants or young children and three samples had a fillable volume between 500 ml and 10 litres (see Annex B).

5 Results and discussion

In the present project, 30 samples of melamine plastic tableware were tested for compliance with specific migration limits for melamine and formaldehyde. Analytical certificates with results and assessments of results were sent to the Norwegian Food Safety Authority.

Information regarding the type of samples (product labelling, sampling date, sampling place, country of origin etc.) is listed in Annex B. Pictures of the samples are shown in Annex C.

All 30 samples were subjected to three successive migration tests in triplicate analyses – 270 migration test results in total. The test results are shown in Annex D.

One sample had migrations results significantly above the SML. Sample number K21-0367, a bowl, exceeded SML for melamine at 2.5 mg/kg in 2 out the triplicate migration tests (1.8, 4.4 and 5.2 mg/kg). Formaldehyde migrations were close to the SML at 15 mg/kg in two results, but did not exceed SML (6.3, 12.8 and 12.9 mg/kg).

In Figure 2 (melamine) and 3 (formaldehyde) average values of the triplicate third migration test results for each sample are plotted in increasing concentrations. Most of the collected articles have migration of melamine and formaldehyde in concentrations from below LOQ of the analytical method to half of the respective SML. Two samples have formaldehyde migration within half of SML and four samples within half of the melamine SML. Only one sample exceeds SML for melamine.

Looking at individual third migration test results below LOQ only one sample has all three triplicates below LOQ for melamine, whereas it is four samples for formaldehyde. The numbers for two of the triplicates below LOQ are three samples for melamine and two samples for formaldehyde. For one of the triplicates to be below LOQ it is three samples for melamine and one for formaldehyde.

The relationship between the melamine and formaldehyde migration for all 30 samples is shown in Figure 4. For the collected articles the relationship appears to be close to linear and with increasing migration values the melamine SML will be exceeded before formaldehyde SML.

Figure 2. Melamine migration test results of all samples. Average of third migration test for three replicates of each sample (SML: Specific migration limit), LOQ: Limit of quantification, for results below LOQ the LOQ value is used in average calculation).

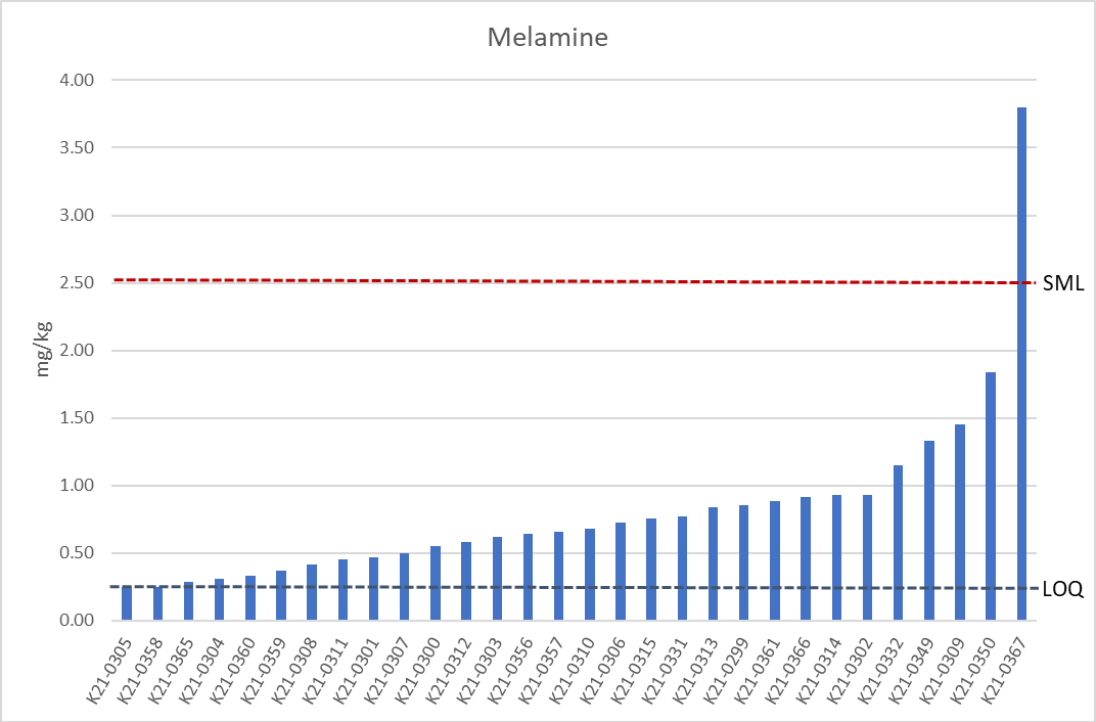


Figure 3. Formaldehyde migration test results of all samples. Average of third migration test for three replicates of each sample (SML: Specific migration limit), LOQ: Limit of quantification, for results below LOQ the LOQ value is used in average calculation).

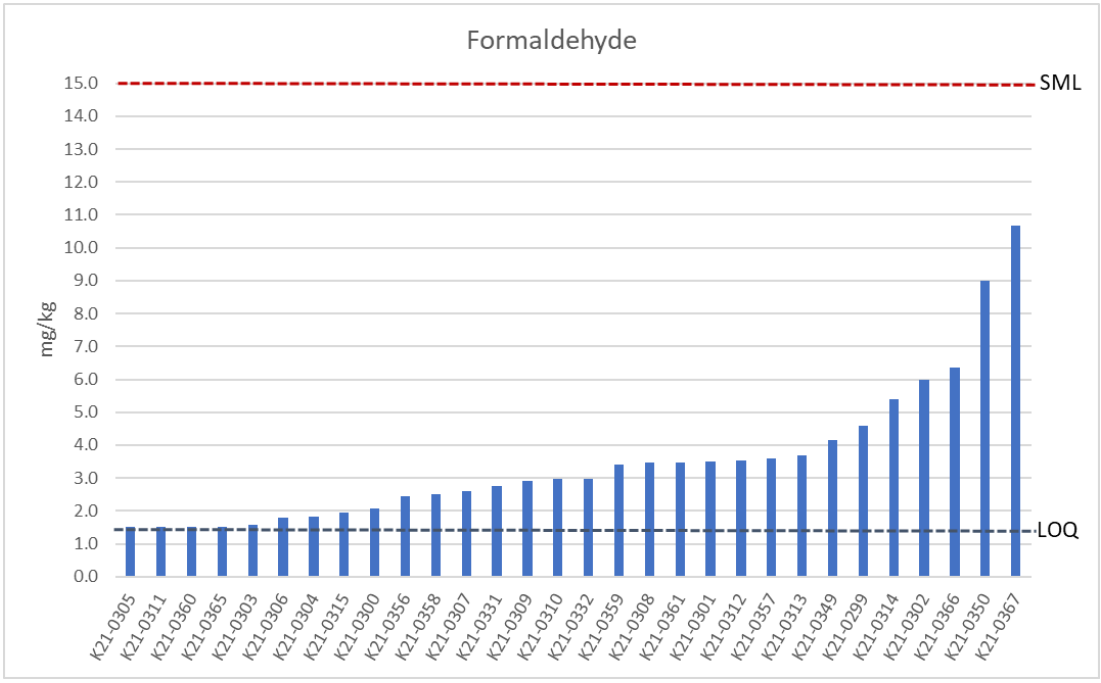
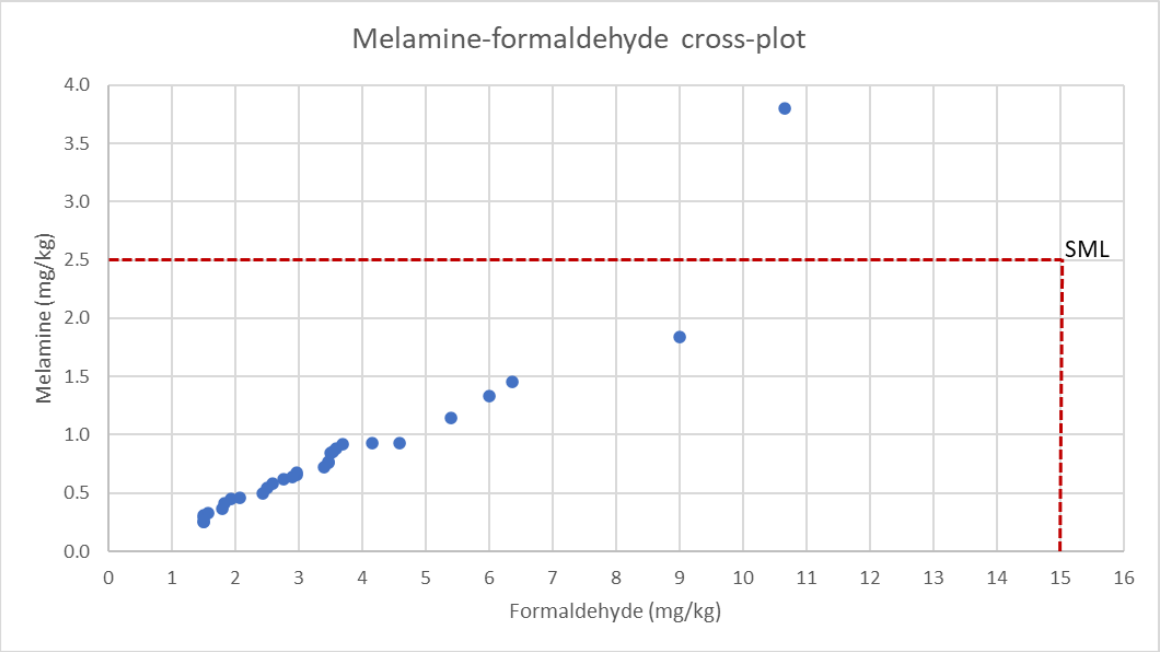


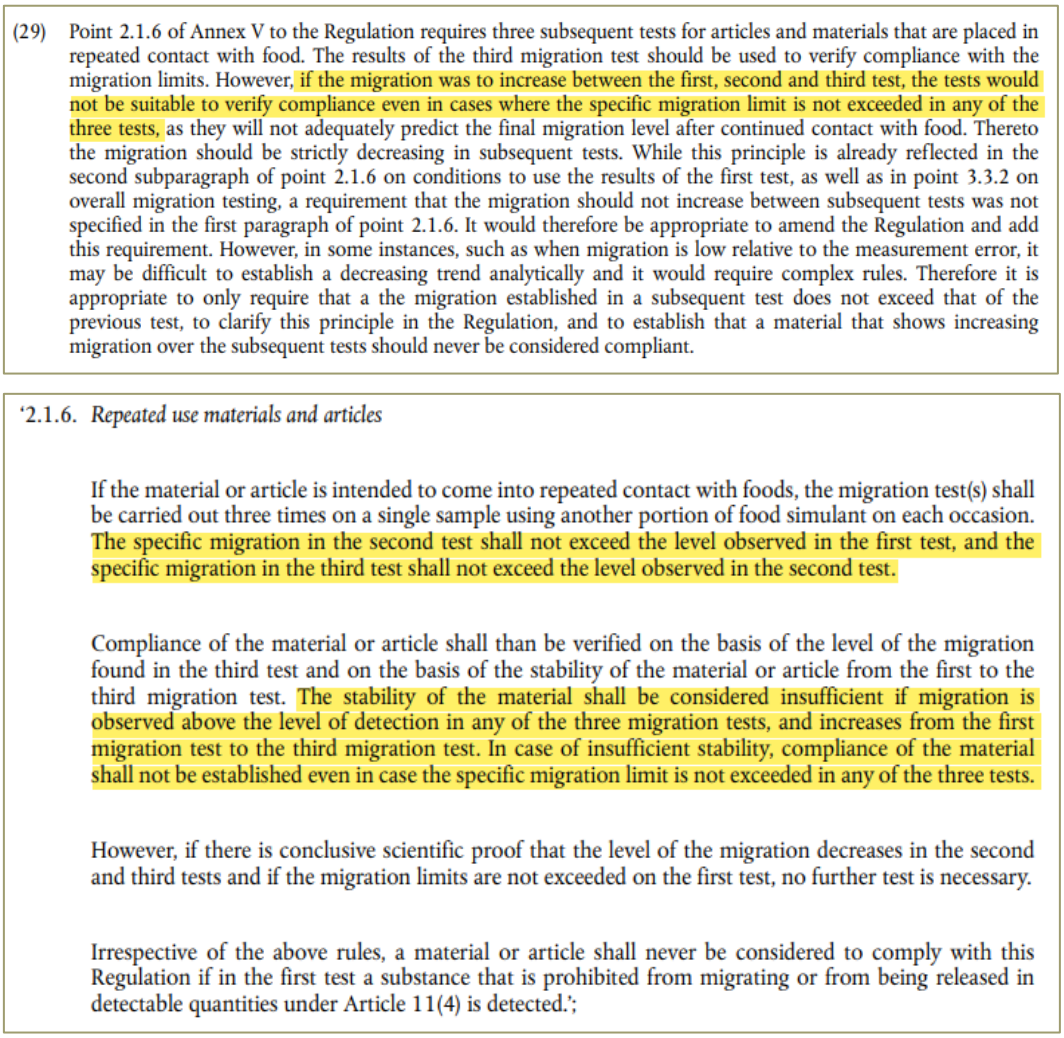
Figure 4. Cross-plot of melamine and formaldehyde migration test results of all samples (average of triplicate third migration tests for each sample).



Several studies of migration behaviour of melamine and formaldehyde from melamine plastic have shown that migration of residual monomers dominates at first, but progressive degradation of the resins occurs later during the lifetime of the product (Mannoni, 2016; Lund, 2006; Bradley, 2005). The migration of monomers continues and even if migration is below SML from the start, SML can be exceeded later after ageing and long-term use.

In order to take increasing migration behaviour into account Regulation (EU) 10/2011 has been amended with a requirement to use all of the three subsequent migration tests in verification of a decreasing trend of migration for repeated use plastic articles (Regulation (EU) 1245/2020). Unfortunately, the text in the Regulation does not precisely describe how the stability test must be carried out to fulfil the new requirement. In Figure 5 the relevant text is highlighted in preamble 29 of Regulation (EU) 1245/2020 and in Annex V, chapter 2 point 2.1.6 of Regulation (EU)10/2011.

Figure 5. Excerpt from Regulation (EU) 1245/2022 concerning stability check of repeated use plastic articles. From preamble (29) and the replaced text of Annex V, chapter 2 point 2.1.6 in Regulation (EU) 10/2011.



(29) Point 2.1.6 of Annex V to the Regulation requires three subsequent tests for articles and materials that are placed in repeated contact with food. The results of the third migration test should be used to verify compliance with the migration limits. However, if the migration was to increase between the first, second and third test, the tests would not be suitable to verify compliance even in cases where the specific migration limit is not exceeded in any of the three tests, as they will not adequately predict the final migration level after continued contact with food. Thereto the migration should be strictly decreasing in subsequent tests. While this principle is already reflected in the second subparagraph of point 2.1.6 on conditions to use the results of the first test, as well as in point 3.3.2 on overall migration testing, a requirement that the migration should not increase between subsequent tests was not specified in the first paragraph of point 2.1.6. It would therefore be appropriate to amend the Regulation and add this requirement. However, in some instances, such as when migration is low relative to the measurement error, it may be difficult to establish a decreasing trend analytically and it would require complex rules. Therefore it is appropriate to only require that a the migration established in a subsequent test does not exceed that of the previous test, to clarify this principle in the Regulation, and to establish that a material that shows increasing migration over the subsequent tests should never be considered compliant.

'2.1.6. *Repeated use materials and articles*

If the material or article is intended to come into repeated contact with foods, the migration test(s) shall be carried out three times on a single sample using another portion of food simulant on each occasion. The specific migration in the second test shall not exceed the level observed in the first test, and the specific migration in the third test shall not exceed the level observed in the second test.

Compliance of the material or article shall than be verified on the basis of the level of the migration found in the third test and on the basis of the stability of the material or article from the first to the third migration test. The stability of the material shall be considered insufficient if migration is observed above the level of detection in any of the three migration tests, and increases from the first migration test to the third migration test. In case of insufficient stability, compliance of the material shall not be established even in case the specific migration limit is not exceeded in any of the three tests.

However, if there is conclusive scientific proof that the level of the migration decreases in the second and third tests and if the migration limits are not exceeded on the first test, no further test is necessary.

Irrespective of the above rules, a material or article shall never be considered to comply with this Regulation if in the first test a substance that is prohibited from migrating or from being released in detectable quantities under Article 11(4) is detected.';

The description of the test for stability in the preamble does not exactly match the text in point 2.1.6 and it is not clear how to test for statistical significance when considering analytical uncertainty. The EU Commission has asked the European Reference Laboratory for food contact materials (EURL-FCM) to publish a guide so a harmonised approached is used. Several options for harmonised procedures have been discussed among EURL-FCM and EU member states and a final conclusion has not yet been drawn.

Three different stability check procedures have been applied on the migration test results obtained in this study (se Annex D). In Table 4 and 5 the numbers of non-compliance samples of the 30 collected articles are summarised. The applied rules for stability verification and the conditions for testing of significant differences are listed as follows:

- 1st migration test: m1; 2nd migration test: m2; 3rd migration test: m3
- Stability check in accordance with Rule 1: m2>m1 or m3>m2 or m3>m1;
  Rule 2:m3>m2>m1
- Significant different migration results are confirmed by one sided statistical test with t=1.645.
- 0.2xSML is 0.5 mg/kg for melamine and 3.0 mg/kg for formaldehyde
- Condition A: Lower reporting range 0.2xSML, result set at 0.2xSML has analytical uncertainty
- Condition B: Lower reporting range 0.2xSML, result set at 0.2xSML has no analytical uncertainty
- Condition C: Analytical method LOQ, result <LOQ has no analytical uncertainty

Table 4. Number of non-compliance samples in verification of no increase from 1st, 2nd, and 3rd migration test. Rule 1

Rule 1	**Condition A**		**Condition B**		**Condition C**	
Non-compliance stability test	Melamine	Formaldehyde	Melamine	Formaldehyde	Melamine	Formaldehyde
1 out of 3 triplicates	10	3	11	3	12	3
2 out of 3 triplicates	2	1	4	1	5	3
3 out of 3 triplicates	4		5		9	
Total non-compliance samples	16	4	20	5	26	10

Table 5. Number of non-compliance samples in verification of no increase from 1st, 2nd, and 3rd migration test. Rule 2

Rule 2	**Condition A**		**Condition B**		**Condition C**	
Non-compliance stability test	Melamine	Formaldehyde	Melamine	Formaldehyde	Melamine	Formaldehyde
1 out of 3 triplicates			2		4	
2 out of 3 triplicates					1	
3 out of 3 triplicates						
Total non-compliance samples			2		5	

It is noticeable that rule 1 gives a high number of non-compliance samples compared to applying rule 2. Using a higher result reporting level of 0.2 times SML instead of LOQ decreases the number of non-compliance samples (rule 1, condition C compared to condition B) from 26 to 20 for melamine and 10 to 5 for formaldehyde. Currently rule 1 condition B appears to be the choice for a harmonised procedure and in that case approximately two-thirds of the collected samples would be judged not to comply with the new stability requirement of plastic articles.

6 Conclusion

The 30 received samples of melamine plastic tableware were subjected to migration test and analysed for melamine and formaldehyde. In 28 samples melamine were detected above the quantification limit and in 26 samples formaldehyde were detected above the quantification limit (third migration test). Only one sample of a bowl exceeded the specific migration limit (SML) for melamine and was non-compliance with EU regulation.

EU regulation on plastic materials intended to come into contact with food has recently been amended with a rule for no increase during three consecutive migration tests even if results are below SMLs. Applying this rule on the 30 samples could result in approximately two-third not being compliance. However, a transition period for this stability rule is in force so it is not applicable for samples from this project. The exact handling of the stability awaits a guidance document from the European Reference Laboratory (EURL) for food contact materials.

References

Bradley EL, Boughtflower V, Smith TL, Speck DR, Castle L. 2005. Survey of the migration of melamine and formaldehyde from melamine food contact articles available on the UK market. Food Addit Contam: Part. 22:597–606.

Bratinova, S.; Raffael, B.; Simoneau, C. (Editors) Guidelines for performance criteria and validation procedures of analytical methods used in controls of food contact materials. Luxembourg: Office for Official Publications of the European Communities, 2009 ISBN 978-92-79-14483-7, DOI 10.2788/49046, JRC53034.

DS/CEN/TS 13130-23:2005. Materials and articles in contact with foodstuffs – Plastics substances subjected to limitation – Part 23: Determination of formaldehyde and hexamethylenetretamine in food simulants.

DS/CEN/TS 13130-27:2005. Materials and articles in contact with foodstuffs – Plastics substances subjected to limitation – Part 27: Determination of 2,4,6-triamino-1,3,5-triazine in food simulants.

DS/EN 16858:2017. Foodstuffs – Determination of melamine and cyanuric acid in foodstuffs by liquid chromatography and tandem mass spectrometry.

DTU Food – National Food Institute 2019. Accredited analytical method FA479.1. Determination of melamine, cyanuric acid and formaldehyde in food simulant 3% acetic acid by LC-MS/MS.

European Commission 2011. Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food.

European Commission 2020. Regulation (EU) No 1245/2020 of 2 September 2020 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food.

Lund KH, Petersen JH. 2006. Migration of formaldehyde and melamine monomers from kitchen and tableware made of melamine plastic. Food Addit Contam: 23:948–955.

Mannoni V, Padula G, Panico O, Maggio A, Arena C & Milana M-R, 2017. Migration of formaldehyde and melamine from melaware and other amino resin tableware in real life service, Food Additives & Contaminants: Part A, 34:1, 113-125.

Mattilsynet, 2020. Melamine and formaldehyde in melamine plastic products. Selected samples from the Norwegian market in 2019. Rapport: Melamine and formaldehyde in melamine plastic products 2019 (mattilsynet.no)

Simoneau, C. (Editor). Technical guidelines on testing the migration of primary aromatic amines from polyamide kitchenware and of formaldehyde from melamine kitchenware - 1st edition 2011. Luxembourg: Office for Official Publications of the European Communities, 2011. 978-92-79-20202-5, DOI:10.2788/19211, JRC64903.

Annex A. LC-MS/MS instrument parameters

Melamine and cyanuric acid MS parameter:

Spray Voltage 3500 V (neg)/4500 V (pos)
Cone Gas Flow 20
Cone Temperature 350
Probe Gas Flow 40
Probe Temperature 375
Nebulizer Gas Flow 50
Manifold Temperature 40
Exhaust Gas Off
CID Gas 2,0 mTorr
Vacuum ~ 2,3e-5 mbar

Stof	Kvantifikations ion (CE)	Identifikations ion (CE)
Melamin (pos)	127.2 > 85.2 (16)	127.2 > 68.2 (27)
Cyanursyre (neg)	128.0 > 42.4 (13)	128.0 > 85.1 (7)
Melamin-$^{13}C_3$ (pos)	130.2 > 86.2(16)	
Cyanursyre-$^{13}C_3$-^{15}N (neg)	134.0 > 44.4 (12)	

Formaldehyde MS parameter:

Spray Voltage 4000 V (pos)
Cone Gas Flow 20
Cone Temperature 350
Probe Gas Flow 40
Probe Temperature 375
Nebulizer Gas Flow 50
Manifold Temperature 40
Exhaust Gas Off
CID Gas 2,0 mTorr
Vacuum ~ 2,3e-5 mbar

Stof	Kvantifikations ion (CE)	Identifikations ion (CE)
Formaldehyd	194.1 > 43.0 (23)	194.1 > 176.0 (12)
Formaldehyd-^{13}C3	197.1 > 43.0 (20)	

Annex B. Sampling information of samples for melamine and formaldehyde analyses

DTU sample ID	NFA sample ID	Sampling date	Received data	Product labelling	Sampling place	Country of origin	NFA region office	Surface to volume ratio*
K21-0299	130921048293 (3)	13-09-2021	28-09-2021	2-handle Spout Cup Happy Dot - Blue. 17650DoneByDeer, Item no. 10556	Babyshop Stavanger AVD 23	China	Region Sør og vest, Avd Sør -Rogaland, Sirdal og Flekkefjord	Actual (infant and young children)
K21-0300	2	02-09-2021	28-09-2021	Kjelland, kopp (art.nr. 46191682)	Kitch'n Kvadrat	Unknown	Region Sør og vest, Avd Sør -Rogaland, Sirdal og Flekkefjord	6
K21-0301	1	02-09-2021	28-09-2021	Mummi, tallerken (art.nr. 6961)	Babycare	Unknown	Region Sør og vest, Avd Sør -Rogaland, Sirdal og Flekkefjord	6
K21-0302	130921048308 (4)	13-09-2021	28-09-2021	Tallerken av melamin Art 85-0357	Biltema Norge AVD 204 Sandnes	Unknown	Region Sør og vest, Avd Sør -Rogaland, Sirdal og Flekkefjord	6
K21-0303	0589303	09-09-2021	01-10-2021	Ratt start Bridge Bowl	Leika Oslo City	China	Region Stor Oslo, Avd Oslo, Asker og Bærum	6
K21-0304	0589313	23-09-2021	01-10-2021	Liten bolle med blomster (gul med blomster og rosa inni), MELBW-SSUF	Atavola AS	Thailand	Region Stor Oslo, Avd Oslo, Asker og Bærum	6
K21-0305	0589309	20-09-2021	01-10-2021	Reusable take away cup (Ø 9 cm * 14,5 cm)	Espresso House Flytogterminalen	UK	Region Stor Oslo, Avd Oslo, Asker og Bærum	6
K21-0306	0589308	14-09-2021	01-10-2021	Azure 4 pk stacking mug set, Flamefield Essentials	Kroken Caravan AS AVD Kolvik	Unknown	Region Stor Oslo, Avd Oslo, Asker og Bærum	6

K21-0307	0589312	24-09-2021	01-10-2021	Mummikopp by Martinex, "Lille MY" rød	Inspirasjon Forlag	China	Region Stor Oslo, Avd Oslo, Asker og Bærum	6
K21-0308	0589311	15-09-2021	01-10-2021	Exxent gasteconomy 1/3 65 mm buffet container	Norengros AS	India	Region Stor Oslo, Avd Oslo, Asker og Bærum	Actual (0.5 – 10 litres)
K21-0309	0589310	15-09-2021	01-10-2021	BBM mug 20 cl	Norengros AS	China	Region Stor Oslo, Avd Oslo, Asker og Bærum	6
K21-0310	0589305	09-09-2021	01-10-2021	Ratt start Elsa Beskow tutekopp Blomsterbarn	Sprell Grunerløkka	China	Region Stor Oslo, Avd Oslo, Asker og Bærum	Actual (infant and young children)
K21-0311	0589302	06-09-2021	01-10-2021	Salat/suppebolle Koni Bowl	Home Q	Tyrkey	Region Stor Oslo, Avd Oslo, Asker og Bærum	Actual (0.5 – 10 litres)
K21-0312	0589306	08-09-2021	01-10-2021	Fantorangen tallerken	Princess Strømmen	China	Region Stor Oslo, Avd Oslo, Asker og Bærum	6
K21-0313	0589307	14-09-2021	01-10-2021	Gimex melamine plus, dekketøy barn (skogsdyr), 3 deler	Kroken Caravan AS avd Oslo	Germany	Region Stor Oslo, Avd Oslo, Asker og Bærum	Actual (infant and young children)
K21-0314	0589301	06-09-2021	01-10-2021	Sigikid Melaminkopp	PinkorBlue.no/Baby-markt.de	China	Region Stor Oslo, Avd Oslo, Asker og Bærum	6
K21-0315	0589304	08-09-2021	01-10-2021	Smallstuff cup no handle, Flower, bamboo	Ringo Strømmen	China	Region Stor Oslo, Avd Oslo, Asker og Bærum	6
K21-0331	2	02-07-2021	04-10-2021	Rosendahl reduce, 2 bowl	Tilbords Mandal	Denmark	Region Sør og vest, avd Agder	6

K21-0332	1	02-07-2021	04-10-2021	OUTDOOR	Tilbords Mandal	Unknown	Region Sør og vest, avd Agder	6
K21-0349	3	30-09-2021	12-10-2021	Cup Melamine Little Chums Cat	Karo og Jossi, Risør	Germany	Region Sør og vest, avd Bergen	Actual (infant and young children)
K21-0350	0589314	10-09-2021	14-10-2021	Babblarna - baby drinking cup	Boozt.com	China	Region Stor Oslo, Avd Oslo, Asker og Bærum	Actual (infant and young children)
K21-0356	51021054656	23-09-2021	20-10-2021	Welcome krus	Bestmarin Bergen AS Litleåsvegen 2, 5132 Nyborg (butikk)	China	Region Sør og vest, avd Bergen	6
K21-0357	41021054321	30-09-2021	20-10-2021	Sebra Tutkopp Daydream	Illums Bolighus Bergen Strandgaten 20, 5013 Bergen (butikk)	China	Region Sør og vest, avd Bergen	Actual (infant and young children)
K21-0358	51021054545	10-09-2021	20-10-2021	Melaminkrus	Spar Kjøp Kokstad Kokstadflaten 30, 5257 Kokstad (butikk)	China	Region Sør og vest, avd Bergen	6
K21-0359	51021054949	05-10-2021	20-10-2021	GreenGate Henrietta Krus Melamin Hvit	Mulitrend AS Engenes 17, 4865 Åmli (tilsendt fra nettbutikk)	Unknown	Region Sør og vest, avd Bergen	6
K21-0360	41021054343	30-09-2021	20-10-2021	Tallerken Suppe Dessert My Fusion Blå	Bergen Caravan AS Hylkjeflaten 1, 5109 Hylkje (butikk)	China	Region Sør og vest, avd Bergen	Actual (0.5 – 10 litres)

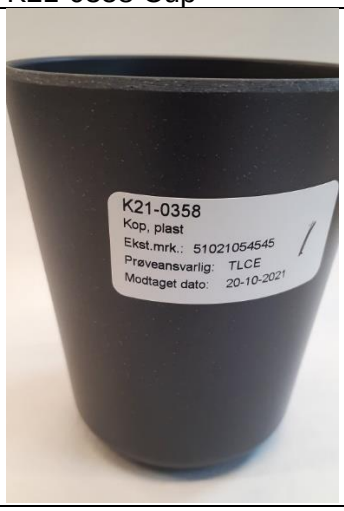
K21-0361	41021054344	30-09-2021	20-10-2021	Cuisine Melaminskål - Peon 15 cm	Europris Åsane Pluss Liamyrane 8, 5132 Nyborg (butikk)	China	Region Sør og vest, avd Bergen	6
K21-0365	251021059545	01-10-2021	29-10-2021	Rosti sleiv 524	Christiania Glasmagasin Skien	Denmark	Region Øst, avd Telemark	6
K21-0366	251021059555	07-10-2021	29-10-2021	GastroMax Sleiv 25 cm	Coop Obs Sandefjord	Sweden	Region Øst, avd Telemark	6
K21-0367	181021057769	18-10-2021	02-11-2021	Bolle Frida sort/eik	Culina Bergen, Thomsen Storkjøkken AS, Liamyrane 15, 5132 Nyborg	China	Region Sør og vest, avd Bergen	6

*: Surface to volume ratio used to correct migration test results into unit mg/kg food or food simulant.

Annex C. Photos of the surveyed samples

K21-0299 Cup	K21-0300 Cup	K21-0301 Plate
		
K21-0302 Plate	K21-0303 Bowl	K21-0304 Bowl
		
K21-0305 Cup	K21-0306 Cup	K21-0307 Cup
		

K21-0308 Tray	K21-0309 Cup	K21-0310 Cup
		
K21-0311 Bowl	K21-0312 Plate	K21-0313 Cup
		
K21-0314 Cup	K21-0315 Cup	K21-0331 Bowl
		

K21-0332 Cup	K21-0349 Cup	K21-0350 Cup
		
K21-0356 Cup	**K21-0357 Cup**	**K21-0358 Cup**
		
K21-0359 Cup	**K21-0360 Plate**	**K21-0361 Bowl**
		

K21-0365 Spoon	K21-0366 Spoon	K21-0367 Bowl
		

Annex D. Results of migration test for melamine and formaldehyde (mg/kg)

Explanation for table column titles, abbreviation, and conditions for stability verification:

1st migration test: m1

2nd migration test: m2

3rd migration test: m3

Stability check in accordance with

Rule 1:m2>m1 or m3>m2 or m3>m1

Rule 2:m3>m2>m1

Significance range: one sided with t=1.645

0.2xSML is 0.5 mg/kg for melamine and 3.0 mg/kg for formaldehyde

A: Lower reporting range 0.2xSML, results set at 0.2xSML has analytical uncertainty

B: Lower reporting range 0.2xSML, results set at 0.2xSML has no analytical uncertainty

C: Analytical method LOQ, results <LOQ has no analytical uncertainty

In table data entry:

C: Compliance

N: Non-compliance

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0299	1. Sample item - 1. Migration test	Melamine	0.26	mg/kg	0.50						
K21-0299	1. Sample item - 2. Migration test	Melamine	0.64	mg/kg	0.64						
K21-0299	1. Sample item - 3. Migration test	Melamine	1.00	mg/kg	1.00	N	N	N	C	N	N
K21-0299	2. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0299	2. Sample item - 2. Migration test	Melamine	0.50	mg/kg	0.50						
K21-0299	2. Sample item - 3. Migration test	Melamine	0.79	mg/kg	0.79	N	N	N	C	C	N
K21-0299	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0299	3. Sample item - 2. Migration test	Melamine	0.53	mg/kg	0.53						
K21-0299	3. Sample item - 3. Migration test	Melamine	0.77	mg/kg	0.77	N	N	N	C	C	C
K21-0299	1. Sample item - 1. Migration test	Formaldehyde	2.9	mg/kg	3.00						
K21-0299	1. Sample item - 2. Migration test	Formaldehyde	3.4	mg/kg	3.36						
K21-0299	1. Sample item - 3. Migration test	Formaldehyde	3.4	mg/kg	3.36	C	C	C	C	C	C
K21-0299	2. Sample item - 1. Migration test	Formaldehyde	4.4	mg/kg	4.43						
K21-0299	2. Sample item - 2. Migration test	Formaldehyde	6.0	mg/kg	6.04						
K21-0299	2. Sample item - 3. Migration test	Formaldehyde	5.2	mg/kg	5.25	C	C	C	C	C	C
K21-0299	3. Sample item - 1. Migration test	Formaldehyde	4.8	mg/kg	4.84						
K21-0299	3. Sample item - 2. Migration test	Formaldehyde	5.7	mg/kg	5.75						
K21-0299	3. Sample item - 3. Migration test	Formaldehyde	5.2	mg/kg	5.23	C	C	C	C	C	C
K21-0300	1. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0300	1. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0300	1. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0300	2. Sample item - 1. Migration test	Melamine	0.26	mg/kg	0.50						
K21-0300	2. Sample item - 2. Migration test	Melamine	0.25	mg/kg	0.50						
K21-0300	2. Sample item - 3. Migration test	Melamine	0.99	mg/kg	0.99	N	N	N	C	C	C
K21-0300	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0300	3. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0300	3. Sample item - 3. Migration test	Melamine	0.40	mg/kg	0.50	C	C	N	C	C	C
K21-0300	1. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0300	1. Sample item - 2. Migration test	Formaldehyde	2.2	mg/kg	3.00						
K21-0300	1. Sample item - 3. Migration test	Formaldehyde	1.7	mg/kg	3.00	C	C	C	C	C	C
K21-0300	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0300	2. Sample item - 2. Migration test	Formaldehyde	2.3	mg/kg	3.00						
K21-0300	2. Sample item - 3. Migration test	Formaldehyde	1.8	mg/kg	3.00	C	C	N	C	C	C
K21-0300	3. Sample item - 1. Migration test	Formaldehyde	1.5	mg/kg	3.00						
K21-0300	3. Sample item - 2. Migration test	Formaldehyde	3.1	mg/kg	3.11						
K21-0300	3. Sample item - 3. Migration test	Formaldehyde	2.7	mg/kg	3.00	C	C	N	C	C	C
K21-0301	1. Sample item - 1. Migration test	Melamine	0.28	mg/kg	0.50						
K21-0301	1. Sample item - 2. Migration test	Melamine	0.73	mg/kg	0.73						
K21-0301	1. Sample item - 3. Migration test	Melamine	0.89	mg/kg	0.89	N	N	N	C	C	C
K21-0301	2. Sample item - 1. Migration test	Melamine	0.30	mg/kg	0.50						
K21-0301	2. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0301	2. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0301	3. Sample item - 1. Migration test	Melamine	0.40	mg/kg	0.50						
K21-0301	3. Sample item - 2. Migration test	Melamine		mg/kg							
K21-0301	3. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	-	-	-	-	-	-
K21-0301	1. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0301	1. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0301	1. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0301	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0301	2. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0301	2. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0301	3. Sample item - 1. Migration test	Formaldehyde		mg/kg							
K21-0301	3. Sample item - 2. Migration test	Formaldehyde		mg/kg							
K21-0301	3. Sample item - 3. Migration test	Formaldehyde	7.5	mg/kg	7.46	-	-	-	-	-	-

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0302	1. Sample item - 1. Migration test	Melamine	1.31	mg/kg	1.31						
K21-0302	1. Sample item - 2. Migration test	Melamine	1.8	mg/kg	1.84						
K21-0302	1. Sample item - 3. Migration test	Melamine	1.24	mg/kg	1.24	C	C	C	C	C	C
K21-0302	2. Sample item - 1. Migration test	Melamine	0.34	mg/kg	0.50						
K21-0302	2. Sample item - 2. Migration test	Melamine	0.40	mg/kg	0.50						
K21-0302	2. Sample item - 3. Migration test	Melamine	1.00	mg/kg	1.00	N	N	N	C	C	C
K21-0302	3. Sample item - 1. Migration test	Melamine	0.59	mg/kg	0.59						
K21-0302	3. Sample item - 2. Migration test	Melamine	0.45	mg/kg	0.50						
K21-0302	3. Sample item - 3. Migration test	Melamine	0.55	mg/kg	0.55	C	C	C	C	C	C
K21-0302	1. Sample item - 1. Migration test	Formaldehyde	5.3	mg/kg	5.27						
K21-0302	1. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0302	1. Sample item - 3. Migration test	Formaldehyde	3.1	mg/kg	3.08	C	C	N	C	C	C
K21-0302	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0302	2. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0302	2. Sample item - 3. Migration test	Formaldehyde	7.8	mg/kg	7.78	N	N	N	C	C	C
K21-0302	3. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0302	3. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0302	3. Sample item - 3. Migration test	Formaldehyde	7.1	mg/kg	7.09	N	N	N	C	C	C
K21-0303	1. Sample item - 1. Migration test	Melamine	0.45	mg/kg	0.50						
K21-0303	1. Sample item - 2. Migration test	Melamine	0.69	mg/kg	0.69						
K21-0303	1. Sample item - 3. Migration test	Melamine	0.56	mg/kg	0.56	C	N	N	C	C	C
K21-0303	2. Sample item - 1. Migration test	Melamine		mg/kg							
K21-0303	2. Sample item - 2. Migration test	Melamine	0.75	mg/kg	0.75						
K21-0303	2. Sample item - 3. Migration test	Melamine	0.85	mg/kg	0.85	-	-	-	-	-	-
K21-0303	3. Sample item - 1. Migration test	Melamine	0.48	mg/kg	0.50						
K21-0303	3. Sample item - 2. Migration test	Melamine	0.31	mg/kg	0.50						
K21-0303	3. Sample item - 3. Migration test	Melamine	0.44	mg/kg	0.50	C	C	C	C	C	C
K21-0303	1. Sample item - 1. Migration test	Formaldehyde	1.9	mg/kg	3.00						
K21-0303	1. Sample item - 2. Migration test	Formaldehyde	2.4	mg/kg	3.00						
K21-0303	1. Sample item - 3. Migration test	Formaldehyde	1.7	mg/kg	3.00	C	C	C	C	C	C
K21-0303	2. Sample item - 1. Migration test	Formaldehyde	2.2	mg/kg	3.00						
K21-0303	2. Sample item - 2. Migration test	Formaldehyde	2.9	mg/kg	3.00						
K21-0303	2. Sample item - 3. Migration test	Formaldehyde	1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0303	3. Sample item - 1. Migration test	Formaldehyde	1.8	mg/kg	3.00						
K21-0303	3. Sample item - 2. Migration test	Formaldehyde	2.5	mg/kg	3.00						
K21-0303	3. Sample item - 3. Migration test	Formaldehyde	1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0304	1. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0304	1. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0304	1. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0304	2. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0304	2. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0304	2. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0304	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0304	3. Sample item - 2. Migration test	Melamine	0.40	mg/kg	0.50						
K21-0304	3. Sample item - 3. Migration test	Melamine	0.42	mg/kg	0.50	C	C	N	C	C	C
K21-0304	1. Sample item - 1. Migration test	Formaldehyde		mg/kg							
K21-0304	1. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0304	1. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	-	-	-	-	-	-
K21-0304	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0304	2. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0304	2. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0304	3. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0304	3. Sample item - 2. Migration test	Formaldehyde		mg/kg							
K21-0304	3. Sample item - 3. Migration test	Formaldehyde	2.5	mg/kg	3.00	-	-	-	-	.	.

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0305	1. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0305	1. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0305	1. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0305	2. Sample item - 1. Migration test	Melamine		mg/kg							
K21-0305	2. Sample item - 2. Migration test	Melamine		mg/kg							
K21-0305	2. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	-	-	-	-	-	-
K21-0305	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0305	3. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0305	3. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0305	1. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0305	1. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0305	1. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0305	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0305	2. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0305	2. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0305	3. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0305	3. Sample item - 2. Migration test	Formaldehyde	1.5	mg/kg	3.00						
K21-0305	3. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0306	1. Sample item - 1. Migration test	Melamine	0.79	mg/kg	0.79						
K21-0306	1. Sample item - 2. Migration test	Melamine	0.83	mg/kg	0.83						
K21-0306	1. Sample item - 3. Migration test	Melamine	0.96	mg/kg	0.96	C	C	C	C	C	C
K21-0306	2. Sample item - 1. Migration test	Melamine	0.47	mg/kg	0.50						
K21-0306	2. Sample item - 2. Migration test	Melamine	0.60	mg/kg	0.60						
K21-0306	2. Sample item - 3. Migration test	Melamine	0.69	mg/kg	0.69	C	N	C	C	C	C
K21-0306	3. Sample item - 1. Migration test	Melamine	0.25	mg/kg	0.50						
K21-0306	3. Sample item - 2. Migration test	Melamine	0.41	mg/kg	0.50						
K21-0306	3. Sample item - 3. Migration test	Melamine	0.52	mg/kg	0.52	C	C	N	C	C	C
K21-0306	1. Sample item - 1. Migration test	Formaldehyde	2.7	mg/kg	3.00						
K21-0306	1. Sample item - 2. Migration test	Formaldehyde	1.5	mg/kg	3.00						
K21-0306	1. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0306	2. Sample item - 1. Migration test	Formaldehyde	2.5	mg/kg	3.00						
K21-0306	2. Sample item - 2. Migration test	Formaldehyde	1.7	mg/kg	3.00						
K21-0306	2. Sample item - 3. Migration test	Formaldehyde	1.9	mg/kg	3.00	C	C	C	C	C	C
K21-0306	3. Sample item - 1. Migration test	Formaldehyde	2.4	mg/kg	3.00						
K21-0306	3. Sample item - 2. Migration test	Formaldehyde	1.7	mg/kg	3.00						
K21-0306	3. Sample item - 3. Migration test	Formaldehyde	2.0	mg/kg	3.00	C	C	C	C	C	C
K21-0307	1. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0307	1. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0307	1. Sample item - 3. Migration test	Melamine	0.42	mg/kg	0.50	C	C	N	C	C	C
K21-0307	2. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0307	2. Sample item - 2. Migration test	Melamine	0.39	mg/kg	0.50						
K21-0307	2. Sample item - 3. Migration test	Melamine	0.57	mg/kg	0.57	C	C	N	C	C	C
K21-0307	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0307	3. Sample item - 2. Migration test	Melamine	0.25	mg/kg	0.50						
K21-0307	3. Sample item - 3. Migration test	Melamine	0.49	mg/kg	0.50	C	C	N	C	C	C
K21-0307	1. Sample item - 1. Migration test	Formaldehyde	1.6	mg/kg	3.00						
K21-0307	1. Sample item - 2. Migration test	Formaldehyde	1.7	mg/kg	3.00						
K21-0307	1. Sample item - 3. Migration test	Formaldehyde	2.3	mg/kg	3.00	C	C	C	C	C	C
K21-0307	2. Sample item - 1. Migration test	Formaldehyde	1.7	mg/kg	3.00						
K21-0307	2. Sample item - 2. Migration test	Formaldehyde	2.6	mg/kg	3.00						
K21-0307	2. Sample item - 3. Migration test	Formaldehyde	2.3	mg/kg	3.00	C	C	C	C	C	C
K21-0307	3. Sample item - 1. Migration test	Formaldehyde	2.6	mg/kg	3.00						
K21-0307	3. Sample item - 2. Migration test	Formaldehyde	2.7	mg/kg	3.00						
K21-0307	3. Sample item - 3. Migration test	Formaldehyde	3.2	mg/kg	3.25	C	C	C	C	C	C

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0308	1. Sample item - 1. Migration test	Melamine	1.36	mg/kg	1.36						
K21-0308	1. Sample item - 2. Migration test	Melamine	0.35	mg/kg	0.50						
K21-0308	1. Sample item - 3. Migration test	Melamine	0.52	mg/kg	0.52	C	C	N	C	C	C
K21-0308	2. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0308	2. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0308	2. Sample item - 3. Migration test	Melamine	0.32	mg/kg	0.50	C	C	N	C	C	C
K21-0308	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0308	3. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0308	3. Sample item - 3. Migration test	Melamine	0.41	mg/kg	0.50	C	C	N	C	C	C
K21-0308	1. Sample item - 1. Migration test	Formaldehyde	2.8	mg/kg	3.00						
K21-0308	1. Sample item - 2. Migration test	Formaldehyde	3.7	mg/kg	3.70						
K21-0308	1. Sample item - 3. Migration test	Formaldehyde	3.4	mg/kg	3.40	C	C	C	C	C	C
K21-0308	2. Sample item - 1. Migration test	Formaldehyde	5.9	mg/kg	5.95						
K21-0308	2. Sample item - 2. Migration test	Formaldehyde	4.4	mg/kg	4.38						
K21-0308	2. Sample item - 3. Migration test	Formaldehyde	3.3	mg/kg	3.28	C	C	C	C	C	C
K21-0308	3. Sample item - 1. Migration test	Formaldehyde	7.7	mg/kg	7.70						
K21-0308	3. Sample item - 2. Migration test	Formaldehyde	4.0	mg/kg	4.05						
K21-0308	3. Sample item - 3. Migration test	Formaldehyde	3.7	mg/kg	3.70	C	C	C	C	C	C
K21-0309	1. Sample item - 1. Migration test	Melamine	2.0	mg/kg	1.97						
K21-0309	1. Sample item - 2. Migration test	Melamine	1.22	mg/kg	1.22						
K21-0309	1. Sample item - 3. Migration test	Melamine	1.44	mg/kg	1.44	C	C	C	C	C	C
K21-0309	2. Sample item - 1. Migration test	Melamine	2.1	mg/kg	2.08						
K21-0309	2. Sample item - 2. Migration test	Melamine	1.37	mg/kg	1.37						
K21-0309	2. Sample item - 3. Migration test	Melamine	1.66	mg/kg	1.66	C	C	C	C	C	C
K21-0309	3. Sample item - 1. Migration test	Melamine	1.19	mg/kg	1.19						
K21-0309	3. Sample item - 2. Migration test	Melamine	1.10	mg/kg	1.10						
K21-0309	3. Sample item - 3. Migration test	Melamine	1.26	mg/kg	1.26	C	C	C	C	C	C
K21-0309	1. Sample item - 1. Migration test	Formaldehyde	4.4	mg/kg	4.42						
K21-0309	1. Sample item - 2. Migration test	Formaldehyde	3.7	mg/kg	3.71						
K21-0309	1. Sample item - 3. Migration test	Formaldehyde	2.6	mg/kg	3.00	C	C	C	C	C	C
K21-0309	2. Sample item - 1. Migration test	Formaldehyde	3.0	mg/kg	3.00						
K21-0309	2. Sample item - 2. Migration test	Formaldehyde	2.9	mg/kg	3.00						
K21-0309	2. Sample item - 3. Migration test	Formaldehyde	3.1	mg/kg	3.13	C	C	C	C	C	C
K21-0309	3. Sample item - 1. Migration test	Formaldehyde	3.1	mg/kg	3.09						
K21-0309	3. Sample item - 2. Migration test	Formaldehyde	3.1	mg/kg	3.05						
K21-0309	3. Sample item - 3. Migration test	Formaldehyde	3.0	mg/kg	3.01	C	C	C	C	C	C
K21-0310	1. Sample item - 1. Migration test	Melamine	0.33	mg/kg	0.50						
K21-0310	1. Sample item - 2. Migration test	Melamine	0.68	mg/kg	0.68						
K21-0310	1. Sample item - 3. Migration test	Melamine	0.70	mg/kg	0.70	C	N	N	C	C	C
K21-0310	2. Sample item - 1. Migration test	Melamine	0.43	mg/kg	0.50						
K21-0310	2. Sample item - 2. Migration test	Melamine	0.40	mg/kg	0.50						
K21-0310	2. Sample item - 3. Migration test	Melamine	0.44	mg/kg	0.50	C	C	C	C	C	C
K21-0310	3. Sample item - 1. Migration test	Melamine	0.87	mg/kg	0.87						
K21-0310	3. Sample item - 2. Migration test	Melamine	0.63	mg/kg	0.63						
K21-0310	3. Sample item - 3. Migration test	Melamine	0.89	mg/kg	0.89	C	C	C	C	C	C
K21-0310	1. Sample item - 1. Migration test	Formaldehyde	1.5	mg/kg	3.00						
K21-0310	1. Sample item - 2. Migration test	Formaldehyde	2.4	mg/kg	3.00						
K21-0310	1. Sample item - 3. Migration test	Formaldehyde	3.3	mg/kg	3.28	C	C	N	C	C	C
K21-0310	2. Sample item - 1. Migration test	Formaldehyde	2.9	mg/kg	3.00						
K21-0310	2. Sample item - 2. Migration test	Formaldehyde	2.3	mg/kg	3.00						
K21-0310	2. Sample item - 3. Migration test	Formaldehyde	2.4	mg/kg	3.00	C	C	C	C	C	C
K21-0310	3. Sample item - 1. Migration test	Formaldehyde	2.9	mg/kg	3.00						
K21-0310	3. Sample item - 2. Migration test	Formaldehyde	2.2	mg/kg	3.00						
K21-0310	3. Sample item - 3. Migration test	Formaldehyde	3.2	mg/kg	3.23	C	C	C	C	C	C

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0311	1. Sample item - 1. Migration test	Melamine	0.30	mg/kg	0.50						
K21-0311	1. Sample item - 2. Migration test	Melamine	0.50	mg/kg	0.50						
K21-0311	1. Sample item - 3. Migration test	Melamine	0.85	mg/kg	0.85	N	N	N	C	C	N
K21-0311	2. Sample item - 1. Migration test	Melamine		mg/kg							
K21-0311	2. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0311	2. Sample item - 3. Migration test	Melamine	0.26	mg/kg	0.50	-	-	-	-	-	-
K21-0311	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0311	3. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0311	3. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0311	1. Sample item - 1. Migration test	Formaldehyde	2.1	mg/kg	3.00						
K21-0311	1. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0311	1. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0311	2. Sample item - 1. Migration test	Formaldehyde	1.5	mg/kg	3.00						
K21-0311	2. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0311	2. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0311	3. Sample item - 1. Migration test	Formaldehyde	3.9	mg/kg	3.90						
K21-0311	3. Sample item - 2. Migration test	Formaldehyde	1.9	mg/kg	3.00						
K21-0311	3. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0312	1. Sample item - 1. Migration test	Melamine	0.70	mg/kg	0.70						
K21-0312	1. Sample item - 2. Migration test	Melamine	1.30	mg/kg	1.30						
K21-0312	1. Sample item - 3. Migration test	Melamine	0.37	mg/kg	0.50	N	N	N	C	C	C
K21-0312	2. Sample item - 1. Migration test	Melamine	0.54	mg/kg	0.54						
K21-0312	2. Sample item - 2. Migration test	Melamine	0.45	mg/kg	0.50						
K21-0312	2. Sample item - 3. Migration test	Melamine	0.98	mg/kg	0.98	N	N	N	C	C	C
K21-0312	3. Sample item - 1. Migration test	Melamine	0.65	mg/kg	0.65						
K21-0312	3. Sample item - 2. Migration test	Melamine	0.71	mg/kg	0.71						
K21-0312	3. Sample item - 3. Migration test	Melamine	0.40	mg/kg	0.50	C	C	C	C	C	C
K21-0312	1. Sample item - 1. Migration test	Formaldehyde	1.6	mg/kg	3.00						
K21-0312	1. Sample item - 2. Migration test	Formaldehyde	3.3	mg/kg	3.27						
K21-0312	1. Sample item - 3. Migration test	Formaldehyde	3.2	mg/kg	3.16	C	C	N	C	C	C
K21-0312	2. Sample item - 1. Migration test	Formaldehyde	5.9	mg/kg	5.94						
K21-0312	2. Sample item - 2. Migration test	Formaldehyde	3.1	mg/kg	3.14						
K21-0312	2. Sample item - 3. Migration test	Formaldehyde	5.6	mg/kg	5.55	C	C	C	C	C	C
K21-0312	3. Sample item - 1. Migration test	Formaldehyde	4.0	mg/kg	3.98						
K21-0312	3. Sample item - 2. Migration test	Formaldehyde	10.8	mg/kg	10.75						
K21-0312	3. Sample item - 3. Migration test	Formaldehyde	1.8	mg/kg	3.00	N	N	N	C	C	C
K21-0313	1. Sample item - 1. Migration test	Melamine	0.57	mg/kg	0.57						
K21-0313	1. Sample item - 2. Migration test	Melamine	0.78	mg/kg	0.78						
K21-0313	1. Sample item - 3. Migration test	Melamine	0.85	mg/kg	0.85	C	C	C	C	C	C
K21-0313	2. Sample item - 1. Migration test	Melamine	0.56	mg/kg	0.56						
K21-0313	2. Sample item - 2. Migration test	Melamine	1.01	mg/kg	1.01						
K21-0313	2. Sample item - 3. Migration test	Melamine	0.86	mg/kg	0.86	N	N	N	C	C	C
K21-0313	3. Sample item - 1. Migration test	Melamine	0.77	mg/kg	0.77						
K21-0313	3. Sample item - 2. Migration test	Melamine	0.46	mg/kg	0.50						
K21-0313	3. Sample item - 3. Migration test	Melamine	0.81	mg/kg	0.81	N	N	N	C	C	C
K21-0313	1. Sample item - 1. Migration test	Formaldehyde	3.8	mg/kg	3.78						
K21-0313	1. Sample item - 2. Migration test	Formaldehyde	2.4	mg/kg	3.00						
K21-0313	1. Sample item - 3. Migration test	Formaldehyde	3.1	mg/kg	3.13	C	C	C	C	C	C
K21-0313	2. Sample item - 1. Migration test	Formaldehyde	3.3	mg/kg	3.29						
K21-0313	2. Sample item - 2. Migration test	Formaldehyde	5.7	mg/kg	5.72						
K21-0313	2. Sample item - 3. Migration test	Formaldehyde	3.6	mg/kg	3.57	C	C	C	C	C	C
K21-0313	3. Sample item - 1. Migration test	Formaldehyde	3.2	mg/kg	3.19						
K21-0313	3. Sample item - 2. Migration test	Formaldehyde	4.5	mg/kg	4.55						
K21-0313	3. Sample item - 3. Migration test	Formaldehyde	4.4	mg/kg	4.40	C	C	C	C	C	C

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0314	1. Sample item - 1. Migration test	Melamine	0.25	mg/kg	0.50						
K21-0314	1. Sample item - 2. Migration test	Melamine	0.80	mg/kg	0.80						
K21-0314	1. Sample item - 3. Migration test	Melamine	0.70	mg/kg	0.70	N	N	N	C	C	C
K21-0314	2. Sample item - 1. Migration test	Melamine	0.60	mg/kg	0.60						
K21-0314	2. Sample item - 2. Migration test	Melamine	0.92	mg/kg	0.92						
K21-0314	2. Sample item - 3. Migration test	Melamine	1.00	mg/kg	1.00	N	N	N	C	C	C
K21-0314	3. Sample item - 1. Migration test	Melamine	0.44	mg/kg	0.50						
K21-0314	3. Sample item - 2. Migration test	Melamine	0.94	mg/kg	0.94						
K21-0314	3. Sample item - 3. Migration test	Melamine	1.08	mg/kg	1.08	N	N	N	C	C	C
K21-0314	1. Sample item - 1. Migration test	Formaldehyde	3.0	mg/kg	3.05						
K21-0314	1. Sample item - 2. Migration test	Formaldehyde	6.1	mg/kg	6.06						
K21-0314	1. Sample item - 3. Migration test	Formaldehyde	4.7	mg/kg	4.66	N	N	N	C	C	C
K21-0314	2. Sample item - 1. Migration test	Formaldehyde	5.4	mg/kg	5.40						
K21-0314	2. Sample item - 2. Migration test	Formaldehyde	6.3	mg/kg	6.29						
K21-0314	2. Sample item - 3. Migration test	Formaldehyde	6.1	mg/kg	6.14	C	C	C	C	C	C
K21-0314	3. Sample item - 1. Migration test	Formaldehyde	4.0	mg/kg	4.05						
K21-0314	3. Sample item - 2. Migration test	Formaldehyde	5.1	mg/kg	5.07						
K21-0314	3. Sample item - 3. Migration test	Formaldehyde	5.4	mg/kg	5.43	C	C	C	C	C	C
K21-0315	1. Sample item - 1. Migration test	Melamine	0.26	mg/kg	0.50						
K21-0315	1. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0315	1. Sample item - 3. Migration test	Melamine	0.49	mg/kg	0.50	C	C	N	C	C	C
K21-0315	2. Sample item - 1. Migration test	Melamine	0.93	mg/kg	0.93						
K21-0315	2. Sample item - 2. Migration test	Melamine	0.74	mg/kg	0.74						
K21-0315	2. Sample item - 3. Migration test	Melamine	1.12	mg/kg	1.12	N	N	N	C	C	C
K21-0315	3. Sample item - 1. Migration test	Melamine	0.34	mg/kg	0.50						
K21-0315	3. Sample item - 2. Migration test	Melamine	0.45	mg/kg	0.50						
K21-0315	3. Sample item - 3. Migration test	Melamine	0.66	mg/kg	0.66	C	N	N	C	C	C
K21-0315	1. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0315	1. Sample item - 2. Migration test	Formaldehyde	2.8	mg/kg	3.00						
K21-0315	1. Sample item - 3. Migration test	Formaldehyde	1.7	mg/kg	3.00	C	C	N	C	C	C
K21-0315	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0315	2. Sample item - 2. Migration test	Formaldehyde	2.5	mg/kg	3.00						
K21-0315	2. Sample item - 3. Migration test	Formaldehyde	1.9	mg/kg	3.00	C	C	N	C	C	C
K21-0315	3. Sample item - 1. Migration test	Formaldehyde	1.9	mg/kg	3.00						
K21-0315	3. Sample item - 2. Migration test	Formaldehyde	2.7	mg/kg	3.00						
K21-0315	3. Sample item - 3. Migration test	Formaldehyde	2.2	mg/kg	3.00	C	C	C	C	C	C
K21-0331	1. Sample item - 1. Migration test	Melamine	0.30	mg/kg	0.50						
K21-0331	1. Sample item - 2. Migration test	Melamine	0.45	mg/kg	0.50						
K21-0331	1. Sample item - 3. Migration test	Melamine	0.72	mg/kg	0.72	C	N	N	C	C	N
K21-0331	2. Sample item - 1. Migration test	Melamine	0.30	mg/kg	0.50						
K21-0331	2. Sample item - 2. Migration test	Melamine	0.57	mg/kg	0.57						
K21-0331	2. Sample item - 3. Migration test	Melamine	0.72	mg/kg	0.72	C	N	N	C	C	C
K21-0331	3. Sample item - 1. Migration test	Melamine	0.55	mg/kg	0.55						
K21-0331	3. Sample item - 2. Migration test	Melamine	0.51	mg/kg	0.51						
K21-0331	3. Sample item - 3. Migration test	Melamine	0.86	mg/kg	0.86	N	N	N	C	C	C
K21-0331	1. Sample item - 1. Migration test	Formaldehyde	2.0	mg/kg	3.00						
K21-0331	1. Sample item - 2. Migration test	Formaldehyde	2.3	mg/kg	3.00						
K21-0331	1. Sample item - 3. Migration test	Formaldehyde	2.2	mg/kg	3.00	C	C	C	C	C	C
K21-0331	2. Sample item - 1. Migration test	Formaldehyde	2.8	mg/kg	3.00						
K21-0331	2. Sample item - 2. Migration test	Formaldehyde	3.5	mg/kg	3.54						
K21-0331	2. Sample item - 3. Migration test	Formaldehyde	2.4	mg/kg	3.00	C	C	C	C	C	C
K21-0331	3. Sample item - 1. Migration test	Formaldehyde	3.7	mg/kg	3.73						
K21-0331	3. Sample item - 2. Migration test	Formaldehyde	3.7	mg/kg	3.74						
K21-0331	3. Sample item - 3. Migration test	Formaldehyde	3.7	mg/kg	3.73	C	C	C	C	C	C

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0332	1. Sample item - 1. Migration test	Melamine	0.46	mg/kg	0.50						
K21-0332	1. Sample item - 2. Migration test	Melamine	0.72	mg/kg	0.72						
K21-0332	1. Sample item - 3. Migration test	Melamine	1.11	mg/kg	1.11	N	N	N	C	N	N
K21-0332	2. Sample item - 1. Migration test	Melamine	0.56	mg/kg	0.56						
K21-0332	2. Sample item - 2. Migration test	Melamine	0.79	mg/kg	0.79						
K21-0332	2. Sample item - 3. Migration test	Melamine	1.40	mg/kg	1.40	N	N	N	C	C	C
K21-0332	3. Sample item - 1. Migration test	Melamine	0.49	mg/kg	0.50						
K21-0332	3. Sample item - 2. Migration test	Melamine	0.81	mg/kg	0.81						
K21-0332	3. Sample item - 3. Migration test	Melamine	0.93	mg/kg	0.93	N	N	N	C	C	C
K21-0332	1. Sample item - 1. Migration test	Formaldehyde	2.1	mg/kg	3.00						
K21-0332	1. Sample item - 2. Migration test	Formaldehyde	2.7	mg/kg	3.00						
K21-0332	1. Sample item - 3. Migration test	Formaldehyde	2.4	mg/kg	3.00	C	C	C	C	C	C
K21-0332	2. Sample item - 1. Migration test	Formaldehyde	3.0	mg/kg	3.01						
K21-0332	2. Sample item - 2. Migration test	Formaldehyde	4.1	mg/kg	4.15						
K21-0332	2. Sample item - 3. Migration test	Formaldehyde	3.3	mg/kg	3.26	C	C	C	C	C	C
K21-0332	3. Sample item - 1. Migration test	Formaldehyde	3.7	mg/kg	3.71						
K21-0332	3. Sample item - 2. Migration test	Formaldehyde	4.7	mg/kg	4.68						
K21-0332	3. Sample item - 3. Migration test	Formaldehyde	3.2	mg/kg	3.24	C	C	C	C	C	C
K21-0349	1. Sample item - 1. Migration test	Melamine	2.3	mg/kg	2.27						
K21-0349	1. Sample item - 2. Migration test	Melamine	1.00	mg/kg	1.00						
K21-0349	1. Sample item - 3. Migration test	Melamine	1.36	mg/kg	1.36	C	C	C	C	C	C
K21-0349	2. Sample item - 1. Migration test	Melamine	1.06	mg/kg	1.06						
K21-0349	2. Sample item - 2. Migration test	Melamine	1.28	mg/kg	1.28						
K21-0349	2. Sample item - 3. Migration test	Melamine	1.27	mg/kg	1.27	C	C	C	C	C	C
K21-0349	3. Sample item - 1. Migration test	Melamine	1.15	mg/kg	1.15						
K21-0349	3. Sample item - 2. Migration test	Melamine	1.18	mg/kg	1.18						
K21-0349	3. Sample item - 3. Migration test	Melamine	1.37	mg/kg	1.37	C	C	C	C	C	C
K21-0349	1. Sample item - 1. Migration test	Formaldehyde	4.6	mg/kg	4.57						
K21-0349	1. Sample item - 2. Migration test	Formaldehyde	10.7	mg/kg	10.65						
K21-0349	1. Sample item - 3. Migration test	Formaldehyde	4.2	mg/kg	4.24	N	N	N	C	C	C
K21-0349	2. Sample item - 1. Migration test	Formaldehyde	4.5	mg/kg	4.53						
K21-0349	2. Sample item - 2. Migration test	Formaldehyde	5.2	mg/kg	5.23						
K21-0349	2. Sample item - 3. Migration test	Formaldehyde	4.0	mg/kg	3.98	C	C	C	C	C	C
K21-0349	3. Sample item - 1. Migration test	Formaldehyde	4.3	mg/kg	4.33						
K21-0349	3. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0349	3. Sample item - 3. Migration test	Formaldehyde	4.3	mg/kg	4.34	C	C	N	C	C	C
K21-0350	1. Sample item - 1. Migration test	Melamine	3.6	mg/kg	3.61						
K21-0350	1. Sample item - 2. Migration test	Melamine	2.7	mg/kg	2.71						
K21-0350	1. Sample item - 3. Migration test	Melamine	1.42	mg/kg	1.42	C	C	C	C	C	C
K21-0350	2. Sample item - 1. Migration test	Melamine	2.9	mg/kg	2.86						
K21-0350	2. Sample item - 2. Migration test	Melamine	2.5	mg/kg	2.53						
K21-0350	2. Sample item - 3. Migration test	Melamine	1.9	mg/kg	1.89	C	C	C	C	C	C
K21-0350	3. Sample item - 1. Migration test	Melamine	1.43	mg/kg	1.43						
K21-0350	3. Sample item - 2. Migration test	Melamine	3.1	mg/kg	3.08						
K21-0350	3. Sample item - 3. Migration test	Melamine	2.2	mg/kg	2.25	N	N	N	C	C	C
K21-0350	1. Sample item - 1. Migration test	Formaldehyde	5.0	mg/kg	4.98						
K21-0350	1. Sample item - 2. Migration test	Formaldehyde	9.4	mg/kg	9.38						
K21-0350	1. Sample item - 3. Migration test	Formaldehyde	9.1	mg/kg	9.09	C	C	C	C	C	C
K21-0350	2. Sample item - 1. Migration test	Formaldehyde	5.4	mg/kg	5.44						
K21-0350	2. Sample item - 2. Migration test	Formaldehyde	8.6	mg/kg	8.62						
K21-0350	2. Sample item - 3. Migration test	Formaldehyde	8.5	mg/kg	8.50	C	C	C	C	C	C
K21-0350	3. Sample item - 1. Migration test	Formaldehyde	10.9	mg/kg	10.94						
K21-0350	3. Sample item - 2. Migration test	Formaldehyde	11.2	mg/kg	11.19						
K21-0350	3. Sample item - 3. Migration test	Formaldehyde	9.4	mg/kg	9.38	C	C	C	C	C	C

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0356	1. Sample item - 1. Migration test	Melamine	0.54	mg/kg	0.54						
K21-0356	1. Sample item - 2. Migration test	Melamine	0.86	mg/kg	0.86						
K21-0356	1. Sample item - 3. Migration test	Melamine	0.69	mg/kg	0.69	N	N	N	C	C	C
K21-0356	2. Sample item - 1. Migration test	Melamine	0.98	mg/kg	0.98						
K21-0356	2. Sample item - 2. Migration test	Melamine	1.08	mg/kg	1.08						
K21-0356	2. Sample item - 3. Migration test	Melamine	0.95	mg/kg	0.95	C	C	C	C	C	C
K21-0356	3. Sample item - 1. Migration test	Melamine	0.25	mg/kg	0.50						
K21-0356	3. Sample item - 2. Migration test	Melamine	0.40	mg/kg	0.50						
K21-0356	3. Sample item - 3. Migration test	Melamine	0.28	mg/kg	0.50	C	C	N	C	C	C
K21-0356	1. Sample item - 1. Migration test	Formaldehyde	3.3	mg/kg	3.32						
K21-0356	1. Sample item - 2. Migration test	Formaldehyde	4.2	mg/kg	4.21						
K21-0356	1. Sample item - 3. Migration test	Formaldehyde	2.6	mg/kg	3.00	C	C	C	C	C	C
K21-0356	2. Sample item - 1. Migration test	Formaldehyde	4.4	mg/kg	4.40						
K21-0356	2. Sample item - 2. Migration test	Formaldehyde	3.8	mg/kg	3.84						
K21-0356	2. Sample item - 3. Migration test	Formaldehyde	3.0	mg/kg	3.00	C	C	C	C	C	C
K21-0356	3. Sample item - 1. Migration test	Formaldehyde	2.0	mg/kg	3.00						
K21-0356	3. Sample item - 2. Migration test	Formaldehyde	2.8	mg/kg	3.00						
K21-0356	3. Sample item - 3. Migration test	Formaldehyde	1.7	mg/kg	3.00	C	C	C	C	C	C
K21-0357	1. Sample item - 1. Migration test	Melamine	0.45	mg/kg	0.50						
K21-0357	1. Sample item - 2. Migration test	Melamine	0.42	mg/kg	0.50						
K21-0357	1. Sample item - 3. Migration test	Melamine	0.60	mg/kg	0.60	C	C	C	C	C	C
K21-0357	2. Sample item - 1. Migration test	Melamine	0.47	mg/kg	0.50						
K21-0357	2. Sample item - 2. Migration test	Melamine	0.48	mg/kg	0.50						
K21-0357	2. Sample item - 3. Migration test	Melamine	0.71	mg/kg	0.71	C	N	N	C	C	C
K21-0357	3. Sample item - 1. Migration test	Melamine		mg/kg	0.50						
K21-0357	3. Sample item - 2. Migration test	Melamine	0.50	mg/kg	0.50						
K21-0357	3. Sample item - 3. Migration test	Melamine	0.66	mg/kg	0.66	C	N	N	C	C	C
K21-0357	1. Sample item - 1. Migration test	Formaldehyde	3.4	mg/kg	3.39						
K21-0357	1. Sample item - 2. Migration test	Formaldehyde	3.1	mg/kg	3.13						
K21-0357	1. Sample item - 3. Migration test	Formaldehyde	3.4	mg/kg	3.45	C	C	C	C	C	C
K21-0357	2. Sample item - 1. Migration test	Formaldehyde	3.0	mg/kg	3.00						
K21-0357	2. Sample item - 2. Migration test	Formaldehyde	3.1	mg/kg	3.07						
K21-0357	2. Sample item - 3. Migration test	Formaldehyde	3.8	mg/kg	3.79	C	C	C	C	C	C
K21-0357	3. Sample item - 1. Migration test	Formaldehyde		mg/kg							
K21-0357	3. Sample item - 2. Migration test	Formaldehyde	3.3	mg/kg	3.26						
K21-0357	3. Sample item - 3. Migration test	Formaldehyde	3.6	mg/kg	3.55	-	-	-	-	-	-
K21-0358	1. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0358	1. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0358	1. Sample item - 3. Migration test	Melamine		mg/kg		-	-	-	-	-	-
K21-0358	2. Sample item - 1. Migration test	Melamine		mg/kg							
K21-0358	2. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0358	2. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	-	-	-	-	-	-
K21-0358	3. Sample item - 1. Migration test	Melamine		mg/kg							
K21-0358	3. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0358	3. Sample item - 3. Migration test	Melamine		mg/kg	0.50	-	-	-	-	-	-
K21-0358	1. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0358	1. Sample item - 2. Migration test	Formaldehyde	2.3	mg/kg	3.00						
K21-0358	1. Sample item - 3. Migration test	Formaldehyde		mg/kg		-	-	-	-	-	-
K21-0358	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0358	2. Sample item - 2. Migration test	Formaldehyde	2.1	mg/kg	3.00						
K21-0358	2. Sample item - 3. Migration test	Formaldehyde	2.4	mg/kg	3.00	C	C	N	C	C	C
K21-0358	3. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0358	3. Sample item - 2. Migration test	Formaldehyde	1.8	mg/kg	3.00						
K21-0358	3. Sample item - 3. Migration test	Formaldehyde	2.6	mg/kg	3.00	C	C	N	C	C	C

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0359	1. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0359	1. Sample item - 2. Migration test	Melamine	0.26	mg/kg	0.50						
K21-0359	1. Sample item - 3. Migration test	Melamine	0.34	mg/kg	0.50	C	C	N	C	C	C
K21-0359	2. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0359	2. Sample item - 2. Migration test	Melamine	0.30	mg/kg	0.50						
K21-0359	2. Sample item - 3. Migration test	Melamine	0.38	mg/kg	0.50	C	C	N	C	C	C
K21-0359	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0359	3. Sample item - 2. Migration test	Melamine	0.32	mg/kg	0.50						
K21-0359	3. Sample item - 3. Migration test	Melamine	0.39	mg/kg	0.50	C	C	N	C	C	C
K21-0359	1. Sample item - 1. Migration test	Formaldehyde	2.6	mg/kg	3.00						
K21-0359	1. Sample item - 2. Migration test	Formaldehyde	4.4	mg/kg	4.44						
K21-0359	1. Sample item - 3. Migration test	Formaldehyde	3.9	mg/kg	3.91	C	C	C	C	C	C
K21-0359	2. Sample item - 1. Migration test	Formaldehyde	1.8	mg/kg	3.00						
K21-0359	2. Sample item - 2. Migration test	Formaldehyde	3.3	mg/kg	3.35						
K21-0359	2. Sample item - 3. Migration test	Formaldehyde	3.1	mg/kg	3.09	C	C	C	C	C	C
K21-0359	3. Sample item - 1. Migration test	Formaldehyde	2.0	mg/kg	3.00						
K21-0359	3. Sample item - 2. Migration test	Formaldehyde	3.2	mg/kg	3.20						
K21-0359	3. Sample item - 3. Migration test	Formaldehyde	3.2	mg/kg	3.22	C	C	C	C	C	C
K21-0360	1. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0360	1. Sample item - 2. Migration test	Melamine	0.25	mg/kg	0.50						
K21-0360	1. Sample item - 3. Migration test	Melamine	0.48	mg/kg	0.50	C	C	N	C	C	C
K21-0360	2. Sample item - 1. Migration test	Melamine	0.26	mg/kg	0.50						
K21-0360	2. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0360	2. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0360	3. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0360	3. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0360	3. Sample item - 3. Migration test	Melamine	0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0360	1. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0360	1. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0360	1. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0360	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0360	2. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0360	2. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0360	3. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0360	3. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0360	3. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0361	1. Sample item - 1. Migration test	Melamine	0.44	mg/kg	0.50						
K21-0361	1. Sample item - 2. Migration test	Melamine	0.51	mg/kg	0.51						
K21-0361	1. Sample item - 3. Migration test	Melamine	0.96	mg/kg	0.96	N	N	N	C	C	C
K21-0361	2. Sample item - 1. Migration test	Melamine	0.44	mg/kg	0.50						
K21-0361	2. Sample item - 2. Migration test	Melamine	0.42	mg/kg	0.50						
K21-0361	2. Sample item - 3. Migration test	Melamine	0.79	mg/kg	0.79	N	N	N	C	C	C
K21-0361	3. Sample item - 1. Migration test	Melamine	0.33	mg/kg	0.50						
K21-0361	3. Sample item - 2. Migration test	Melamine	0.57	mg/kg	0.57						
K21-0361	3. Sample item - 3. Migration test	Melamine	0.89	mg/kg	0.89	N	N	N	C	C	N
K21-0361	1. Sample item - 1. Migration test	Formaldehyde	2.0	mg/kg	3.00						
K21-0361	1. Sample item - 2. Migration test	Formaldehyde	2.7	mg/kg	3.00						
K21-0361	1. Sample item - 3. Migration test	Formaldehyde	3.9	mg/kg	3.91	C	C	C	C	C	C
K21-0361	2. Sample item - 1. Migration test	Formaldehyde	2.3	mg/kg	3.00						
K21-0361	2. Sample item - 2. Migration test	Formaldehyde	2.3	mg/kg	3.00						
K21-0361	2. Sample item - 3. Migration test	Formaldehyde	3.1	mg/kg	3.14	C	C	C	C	C	C
K21-0361	3. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0361	3. Sample item - 2. Migration test	Formaldehyde	2.7	mg/kg	3.00						
K21-0361	3. Sample item - 3. Migration test	Formaldehyde	3.4	mg/kg	3.43	C	C	N	C	C	C

						Rule 1			Rule 2		
DTU Sample ID	Migration test	Compound	Results	Unit	Reporting >0.2xSML	A	B	C	A	B	C
K21-0365	1. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0365	1. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0365	1. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0365	2. Sample item - 1. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0365	2. Sample item - 2. Migration test	Melamine	<0.25	mg/kg	0.50						
K21-0365	2. Sample item - 3. Migration test	Melamine	<0.25	mg/kg	0.50	C	C	C	C	C	C
K21-0365	3. Sample item - 1. Migration test	Melamine	0.26	mg/kg	0.50						
K21-0365	3. Sample item - 2. Migration test	Melamine	0.41	mg/kg	0.50						
K21-0365	3. Sample item - 3. Migration test	Melamine	0.36	mg/kg	0.50	C	C	N	C	C	C
K21-0365	1. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0365	1. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0365	1. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0365	2. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0365	2. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0365	2. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0365	3. Sample item - 1. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0365	3. Sample item - 2. Migration test	Formaldehyde	<1.5	mg/kg	3.00						
K21-0365	3. Sample item - 3. Migration test	Formaldehyde	<1.5	mg/kg	3.00	C	C	C	C	C	C
K21-0366	1. Sample item - 1. Migration test	Melamine	0.58	mg/kg	0.58						
K21-0366	1. Sample item - 2. Migration test	Melamine	0.69	mg/kg	0.69						
K21-0366	1. Sample item - 3. Migration test	Melamine	0.83	mg/kg	0.83	C	C	C	C	C	C
K21-0366	2. Sample item - 1. Migration test	Melamine	0.64	mg/kg	0.64						
K21-0366	2. Sample item - 2. Migration test	Melamine	0.67	mg/kg	0.67						
K21-0366	2. Sample item - 3. Migration test	Melamine	0.91	mg/kg	0.91	C	C	C	C	C	C
K21-0366	3. Sample item - 1. Migration test	Melamine	1.02	mg/kg	1.02						
K21-0366	3. Sample item - 2. Migration test	Melamine	0.64	mg/kg	0.64						
K21-0366	3. Sample item - 3. Migration test	Melamine	1.01	mg/kg	1.01	N	N	N	C	C	C
K21-0366	1. Sample item - 1. Migration test	Formaldehyde	7.3	mg/kg	7.26						
K21-0366	1. Sample item - 2. Migration test	Formaldehyde	5.1	mg/kg	5.12						
K21-0366	1. Sample item - 3. Migration test	Formaldehyde	5.5	mg/kg	5.46	C	C	C	C	C	C
K21-0366	2. Sample item - 1. Migration test	Formaldehyde	6.2	mg/kg	6.24						
K21-0366	2. Sample item - 2. Migration test	Formaldehyde	5.3	mg/kg	5.35						
K21-0366	2. Sample item - 3. Migration test	Formaldehyde	6.1	mg/kg	6.11	C	C	C	C	C	C
K21-0366	3. Sample item - 1. Migration test	Formaldehyde	7.2	mg/kg	7.18						
K21-0366	3. Sample item - 2. Migration test	Formaldehyde	6.5	mg/kg	6.55						
K21-0366	3. Sample item - 3. Migration test	Formaldehyde	7.5	mg/kg	7.54	C	C	C	C	C	C
K21-0367	1. Sample item - 1. Migration test	Melamine	5.3	mg/kg	5.33						
K21-0367	1. Sample item - 2. Migration test	Melamine	4.6	mg/kg	4.63						
K21-0367	1. Sample item - 3. Migration test	Melamine	4.4	mg/kg	4.37	C	C	C	C	C	C
K21-0367	2. Sample item - 1. Migration test	Melamine	1.20	mg/kg	1.20						
K21-0367	2. Sample item - 2. Migration test	Melamine	1.8	mg/kg	1.84						
K21-0367	2. Sample item - 3. Migration test	Melamine	1.8	mg/kg	1.85	N	N	N	C	C	C
K21-0367	3. Sample item - 1. Migration test	Melamine	5.5	mg/kg	5.49						
K21-0367	3. Sample item - 2. Migration test	Melamine	5.5	mg/kg	5.46						
K21-0367	3. Sample item - 3. Migration test	Melamine	5.2	mg/kg	5.23	C	C	C	C	C	C
K21-0367	1. Sample item - 1. Migration test	Formaldehyde	14.8	mg/kg	14.84						
K21-0367	1. Sample item - 2. Migration test	Formaldehyde	15.6	mg/kg	15.64						
K21-0367	1. Sample item - 3. Migration test	Formaldehyde	12.8	mg/kg	12.81	C	C	C	C	C	C
K21-0367	2. Sample item - 1. Migration test	Formaldehyde	3.9	mg/kg	3.94						
K21-0367	2. Sample item - 2. Migration test	Formaldehyde	6.4	mg/kg	6.36						
K21-0367	2. Sample item - 3. Migration test	Formaldehyde	6.3	mg/kg	6.27	C	C	C	C	C	C
K21-0367	3. Sample item - 1. Migration test	Formaldehyde	13.6	mg/kg	13.55						
K21-0367	3. Sample item - 2. Migration test	Formaldehyde	15.6	mg/kg	15.60						
K21-0367	3. Sample item - 3. Migration test	Formaldehyde	12.9	mg/kg	12.86	C	C	C	C	C	C