



TESTING
No.0009

Analysis Report

Work Order : **BK2306773**
Client : Pack Delta Public Company Limited
136-136/1 Moo 17, Bangplee Industrial Estate, Tambon Bangsaothong, Amphoe
Bang Sao Thong, Samut Prakan, Thailand, 10570
Project Location : Pack Delta Public Company Limited

Date Received : May 29, 2023
Date Reported : Jun 21, 2023
Report Number : BK2306773-AA

Sample Number : BK2306773-001
Sampled Date : May 29, 2023
Sample Description : Plastic Cut piece blue color
Date of Analysis : May 30, 2023
Condition of Sample : 1x plastic bag

Analytical Results

Analyte	Unit	LOD	LOQ	Result	Guideline	Method	Testing Lab
Condition of Migration							
Temperature	°C	-	-	>100 °C	-	ME0201	Bangkok
20% Ethanol	-	-	-	30 min at 60°C	-	ME0201	Bangkok
4% Acetic acid	-	-	-	30 min at 95°C	-	ME0201	Bangkok
Deionized Water	-	-	-	30 min at 95°C	-	ME0201	Bangkok
n-Heptane	-	-	-	60 min at 25°C	-	ME0201	Bangkok
Material Test							
Cadmium	mg/kg	0.03	0.50	Not Detected	≤100	ME0209	Bangkok
Lead	mg/kg	0.08	3.00	Not Detected	≤100	ME0209	Bangkok
Microbiological Parameters							
Aerobic Plate Count	CFU/cm ²	-	-	<1	-	MC9001	Bangkok
<i>Bacillus cereus</i>	per 50cm ²	-	-	Not Detected	Not Detected	MC9003	Bangkok
<i>Clostridium perfringens</i>	per 50cm ²	-	-	Not Detected	Not Detected	MC9008	Bangkok
<i>Escherichia coli</i>	per 50cm ²	-	-	Not Detected	-	MC9015	Bangkok
Fecal Streptococcus *	CFU/50cm ²	-	-	<10	-	MC9022	Bangkok
<i>Listeria monocytogenes</i>	per 50cm ²	-	-	Not Detected	-	MC9023	Bangkok
<i>Staphylococcus aureus</i>	per 50cm ²	-	-	Not Detected	Not Detected	MC9032	Bangkok
<i>Salmonella</i> spp.	per 50cm ²	-	-	Not Detected	Not Detected	MC9035	Bangkok
Yeast and Mold	CFU/50cm ²	-	-	<10	-	MC9043	Bangkok
Migration Test							
Potassium Permanganate Consumption	mg/dm ³	0.15	0.5	<0.5	≤10	ME0206	Bangkok
Residue after evaporation (20% Ethanol)	mg/dm ³	2	5	<5	≤30	ME0204	Bangkok
Residue after evaporation (4% Acetic acid)	mg/dm ³	2	5	<5	≤30	ME0203	Bangkok
Residue after evaporation (Deionized Water)	mg/dm ³	2	5	<5	≤30	ME0202	Bangkok

Signatories

Chatchanai Komarakul Na Nakorn
Assistant General Manager

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Analyte	Unit	LOD	LOQ	Result	Guideline	Method	Testing Lab
Migration Test							
Residue after evaporation (n- Heptane)	mg/dm ³	-	5	<5	≤30	ME0205	Bangkok
Total Heavy Metals (as Pb)	mg/dm ³	-	-	<0.5	≤1	ME0208	Bangkok
Phthalates							
Di-butyl phthalate (DBP) *	mg/L	-	0.05	Not Detected	-	FO0392	Bangkok
Benzyl butyl phthalate (BBP) *	mg/L	-	0.05	Not Detected	-	FO0392	Bangkok
Di (2-ethylhexyl) phthalate (DEHP) *	mg/L	-	0.05	Not Detected	-	FO0392	Bangkok
Di-n-octyl phthalate (DNOP) *	mg/L	-	0.05	Not Detected	-	FO0392	Bangkok
Di-iso-nonylphthalate (DINP) *	mg/L	-	0.5	Not Detected	-	FO0392	Bangkok
Di-iso-decylphthalate (DIDP) *	mg/L	-	0.5	Not Detected	-	FO0392	Bangkok

Guideline : Notification of The Ministry of Public Health No. 435, B.E. 2565 Annex 2 on Quality or Standard of Plastic Containers.

Comment : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Sampling is not included in scope of accreditation ISO/IEC 17025

Phthalate has been subcontracted to outsource lab.

Phthalate Test Conditions: n-heptane extraction @ 25 degree C for 1 hour by GCMS

- Key:
- o LOD : Limit of Detection
 - o "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - o Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC17025

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Brief Method Summaries

The methods in the analysis report are short format, refer to full test methods in accordance with the ISO/IEC 17025 certificate no. specified in the analysis report.

Method	Testing Lab	Method Descriptions
FO0392	Bangkok	Taiwan FDA, DOH Food No.1001901064
MC9001	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 8
MC9003	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 31
MC9008	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 33
MC9015	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 9
MC9022	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 10
MC9023	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 35
MC9032	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 39
MC9035	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 36
MC9043	Bangkok	Compendium of Methods for the Microbiological Examination of Foods, 5th ed., 2015, chapter 3 item 3.81 and chapter 21
ME0202	Bangkok	Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008, Japan External Trade Organization, JETRO, section II, B-5
ME0203	Bangkok	Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008, Japan External Trade Organization, JETRO, section II, B-5
ME0204	Bangkok	Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008, Japan External Trade Organization, JETRO, section II, B-5

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Method	Testing Lab	Method Descriptions
ME0205	Bangkok	Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008, Japan External Trade Organization, JETRO, section II, B-5
ME0206	Bangkok	Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008, Japan External Trade Organization, JETRO, section II, B-1 and C-3
ME0208	Bangkok	In-house method : STM 05-018 based on Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008, Japan External Trade Organization, JETRO, section II, B-4
ME0209	Bangkok	In-house method : STM 05-019 based on Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008, Japan External Trade Organization, JETRO, section II, B-9

----- END OF REPORT -----

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Sample Attachment Picture

Sample Number BK2306773-001
Sample Description Plastic Cut piece blue color

