



Test Report

No.HKHL1303023348JL

Date: MAR 22, 2013

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LOTTECHEMICAL CORPORATION
#24-1, JANG-DONG, YUSEONG-GU, DAEJEON, KOREA

The following samples were submitted and identified on behalf of the client as:

HOPELEX

SGS Case No. : HKHL130300013543
SGS Ref. No. : AYAA13-11184
Style / Item No. : PC-1220

Sample Receiving Date : MAR 07, 2013
Test Performing Date : MAR 07 – 21, 2013

Test Requested : Please refer to the result summary.

Test Method & Results : Please refer to next page(s).

Result Summary :

| Test Requested | Conclusion |
|--|------------|
| 1. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 31. | -- |
| Sensorial examination odour and taste test | PASS |
| 2. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30, European Commission Regulation (EU) No 10/2011 and BfR recommendation. | -- |
| Plastic – Lead and Cadmium | PASS |
| 3. European Commission Regulation (EU) No 10/2011 | -- |
| a) Plastic – Overall migration | PASS |
| b) Plastic – Specific migration of Primary Aromatic Amine | PASS |
| c) Plastic – Specific Migration of Heavy Metals | PASS |
| d) PC – Specific migration of Bisphenol A | PASS |

Signed for and on behalf of
SGS Hong Kong Ltd.

Che Wai Leuk, Jerry
Section Manager

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Test Results :

1. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 31.

Sensory examination – odour and taste test

Method : With reference to DIN10955:2004-06.

| Test Item | Result | Permissible Limit |
|---|--------|-------------------|
| | 1 | |
| Sensorial examination odour (Intensity scale) | 1.0 | 2.5 |
| Sensorial examination taste (Intensity scale) | 1.0 | 2.5 |
| Comment | PASS | -- |

Sample Description :

1. Transparent Plastic

Note : Intensity scale :

- 0 – no perceptible deviation
- 1 – deviation just perceptible
- 2 – moderate deviation
- 3 – distinct deviation
- 4 – large deviation

2. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30, European Commission Regulation (EU) No 10/2011 and BfR recommendation.

Plastic – Lead and Cadmium

Method : i) Lead content : Acid digestion followed by analysis with Atomic Absorption Spectrometry.
ii) Cadmium content : With reference to EN 1122:2001, Method B

| Test Item | Result (mg/kg) | Reporting Limit (mg/kg) | Reference Limit (mg/kg) |
|-----------------------------------|----------------|-------------------------|-------------------------|
| | 1 | | |
| Lead content | ND | 2 | Absent |
| Cadmium content | ND | 2 | Absent |
| Comment – Lead and Cadmium | PASS | -- | -- |

Sample Description :

1. Transparent Plastic

Note : 1. Lead and Cadmium content: mg/kg = milligram per kilogram

2. ND = Not Detected

3. When lead or/and cadmium is/are found to be present but feasibly low in value to migrate, migratable lead or cadmium will be determined to evaluate its compliance.

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Test Results (Con't) :

3. European Commission Regulation (EU) No 10/2011

a) Plastic – Overall migration

Method : With reference to EN 1186-1:2002 for selection of conditions and test methods;
EN 1186-3:2002 aqueous food simulants by total immersion method;
EN 1186-2:2002 olive oil by total immersion method;

| Simulant Used | Test Condition | Result (mg/dm ²) | Reporting Limit (mg/dm ²) | Permissible Limit (mg/dm ²) |
|---------------------------------------|------------------|---------------------------------|---|---|
| | | 1 | | |
| Deionized Water | 10 days at 40 °C | ND | 3.0 | 10 |
| 3% Acetic Acid (W/V) Aqueous Solution | 10 days at 40 °C | ND | 3.0 | 10 |
| 10% Ethanol (V/V) Aqueous Solution | 10 days at 40 °C | ND | 3.0 | 10 |
| Rectified Olive Oil | 10 days at 40 °C | ND | 3.0 | 10 |
| Comment | -- | PASS | -- | -- |

Sample Description :

1. Transparent Plastic

Note : 1. mg/dm² = milligram per square decimeter
2. °C = degree Celsius
3. ND = Not Detected

Remark :

1. Test condition & simulant were specified by client.

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Test Results (Con't) :

b) Plastic – Specific Migration of Primary Aromatic Amine

Method : Sample preparation in 3% acetic acid (w/v) in aqueous solution at 40°C for 10 days with reference to EN 13130-1:2004; followed by analysis with reference to DIN 55610:1986.

| Test Item | Result (mg/kg) | Reporting Limit (mg/kg) | Permissible Limit (mg/kg) |
|--------------------------------------|----------------|----------------------------|------------------------------|
| | 1 | | |
| Specific migration of Aromatic Amine | ND | 0.002 | 0.01 |
| Comment | PASS | -- | -- |

Sample Description :

1. Transparent Plastic

Note : 1. mg/kg = milligram per kilogram of foodstuff in contact with

2. °C = degree Celsius

3. ND = Not Detected

Remark :

1. Test condition & simulant were specified by client.

c) Plastic – Specific Migration of Heavy Metals

Method: Sample preparation in 3% acetic acid (w/v) in aqueous solution at 40°C for 10 days with reference to EN 13130-1:2004; followed by analysis using Inductively Coupled Argon Plasma Spectrometry (ICP).

| Test Item | Result (mg/kg) | Reporting Limit (mg/kg) | Permissible Limit (mg/kg) |
|---------------------------------|----------------|----------------------------|------------------------------|
| | 1 | | |
| Specific Migration of Barium | ND | 0.25 | 1 |
| Specific Migration of Cobalt | ND | 0.03 | 0.05 |
| Specific Migration of Copper | ND | 0.25 | 5 |
| Specific Migration of Iron | ND | 0.25 | 48 |
| Specific Migration of Lithium | ND | 0.5 | 0.6 |
| Specific Migration of Manganese | ND | 0.25 | 0.6 |
| Specific Migration of Zinc | ND | 0.5 | 25 |
| Comment | PASS | -- | -- |

Sample Description :

1. Transparent Plastic

Note : 1. mg/kg = milligram per kilogram of foodstuff in contact with

2. °C = degree Celsius

3. ND = Not Detected

Remark :

1. Test condition & simulant were specified by client.

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Test Results (Con't) :

d) PC – Specific Migration of Bisphenol A

Method : Sample preparation in 3% acetic acid (w/v) in aqueous solution at 40°C for 10 days with reference to EN 13130-1:2004; followed by analysis using Liquid Chromatography – Mass Spectrometry (LC-MS).

| Test Item | Result (mg/kg) | Reporting Limit (mg/kg) | Permissible Limit (mg/kg) |
|-----------------------------------|----------------|----------------------------|------------------------------|
| | 1 | | |
| Specific Migration of Bisphenol A | ND | 0.2 | 0.6 |
| Comment | PASS | -- | -- |

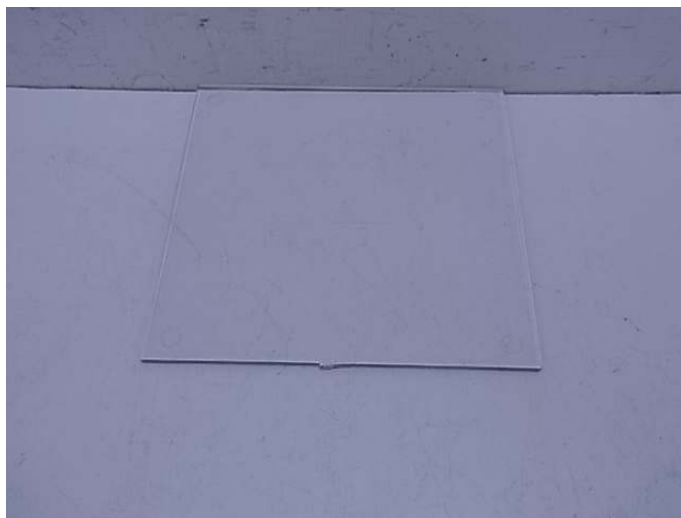
Sample Description :

1. Transparent Plastic

Note : 1. mg/kg = milligram per kilogram of foodstuff in contact with
2. ND = Not Detected

Remark :

1. Test condition & simulant were specified by client.



*** End of Report ***

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