

TEST REPORT: 7191203396-CHM19-05-TSL

Date: 18 FEB 2019

Tel: +65 68851312 Fax: +65 67784301

Client's Ref: 221415984

Email: zhou.xiao@tuv-sud-psb.sg

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SUBJECT

Overall Migration Test for "Powder Free Nitrile Examination Gloves (7.0Mil)" Sample

SAMPLE SUBMISSION DATE

31 Jan 2019

DESCRIPTION OF SAMPLE

One packet of orange color glove sample labelled as follows was received.

No	Description of Gloves	Size	Lot No.	Sample size (Pieces)
1	Powder Free Nitrile Examination Gloves (7.0Mil)	Large	88543 73500	25

DATE OF ANALYSIS

01 Feb 2019 – 18 Feb 2019



TÜV SÜD PSB

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1 Science Park Drive, #02-01
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METHOD OF TEST

The sample was analysed for the following tests according to Commission Regulation (EU) No 10/2011:

1. Preparation of Test Specimen

Only the exterior of the glove sample was performed for the test.

2. Overall Migration Content with Fatty Food Simulant (Olive Oil):

According to BS EN 1186-8:2002 – Test Methods for overall migration into olive oil by article filling.

RESULTS

Table 1 : Overall Migration Content with Food Simulant for the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 88543 73500” Sample

Type of Simulant	Testing Condition	Surface Area (dm ²)	Volume of Extractant (ml)	Overall Migration (mg/dm ²)	Commission Regulation (EU) No 10/2011 Requirement for Overall Migration Content (mg/dm ²)
1. Vegetable Oil (Olive Oil)	40 °C, 2 hours	4.56	230	<1.0	<10

Based on the above result, the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 88543 73500” sample met the overall migration requirement under Commission Regulation (EU) No 10/2011 – “Plastic materials and articles shall not transfer their constituents to foodstuffs in quantities exceeding 10 milligrams of total constituents released per dm² of food contact surface (mg/dm²) (overall migration limit)”.

MS TAN SER LING
TECHNICAL EXECUTIVE

DR XIAO ZHOU
PRODUCT MANAGER
MICROCONTAMINATION DIAGNOSIS
CHEMICAL & MATERIALS

TEST REPORT: 7191203396-CHM19-05-TSL

18 FEB 2019



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July 2011



TEST REPORT: 7191210846-CHM19-TSL

Date: 03 JUN 2019

Tel: +65 68851312 Fax: +65 67784301

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SUBJECT

Overall Migration Test for "Powder Free Nitrile Examination Gloves (7.0Mil)" Sample

SAMPLE SUBMISSION DATE

17 May 2019

DESCRIPTION OF SAMPLE

One packet of glove sample labelled as follows was received.

No	Description of Glove	Size	Lot No.	Quantity
1	Powder Free Nitrile Examination Gloves (7.0Mil)	Large	89153 79214	10 pieces

DATE OF ANALYSIS

27 May 2019 – 03 Jun 2019



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Singapore 118221
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METHOD OF TEST

The sample was analysed for the following tests according to Commission Regulation (EU) No 10/2011:

1. Preparation of Test Specimen

Only the exterior of the glove sample was performed for the test.

2. Overall Migration Content with Aqueous Food Simulant (3% Acetic Acid)

According to BS EN 1186-9:2002 – Test Methods for overall migration into aqueous food simulants by article filling.

RESULTS

Table 1 : Overall Migration Content with Food Simulant for the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 89153 79214” Sample

Type of Simulant	Testing Condition	Surface Area (dm ²)	Volume of Extractant (ml)	Overall Migration (mg/dm ²)	Commission Regulation (EU) No 10/2011 Requirement for Overall Migration Content (mg/dm ²)
1. 3% Acetic Acid	40 °C, 2 hours	4.76	240	8.5	<10

Based on the above result, the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 89153 79214” sample met the overall migration requirement under Commission Regulation (EU) No 10/2011 – “Plastic materials and articles shall not transfer their constituents to foodstuffs in quantities exceeding 10 milligrams of total constituents released per dm² of food contact surface (mg/dm²) (overall migration limit)”.



MS TAN SER LING
TECHNICAL EXECUTIVE



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PRODUCT MANAGER
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TEST REPORT: 7191210846-CHM19-TSL

03 JUN 2019



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July 2011



TEST REPORT: 7191203396-CHM19-01-TSL

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SUBJECT

Overall Migration Test for "Powder Free Nitrile Examination Gloves (7.0Mil)" Sample

SAMPLE SUBMISSION DATE

31 Jan 2019

DESCRIPTION OF SAMPLE

One packet of orange color glove sample labelled as follows was received.

No	Description of Gloves	Size	Lot No.	Sample size (Pieces)
1	Powder Free Nitrile Examination Gloves (7.0Mil)	Large	88543 73500	25

DATE OF ANALYSIS

01 Feb 2019 – 18 Feb 2019



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METHOD OF TEST

The sample was analysed for the following tests according to Commission Regulation (EU) No 10/2011:

1. Preparation of Test Specimen

Only the exterior of the glove sample was performed for the test.

2. Overall Migration Content with Aqueous Food Simulant (10% Ethanol)

According to BS EN 1186-9:2002 – Test Methods for overall migration into aqueous food simulants by article filling.

RESULTS

Table 1 : Overall Migration Content with Food Simulant for the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 88543 73500” Sample

Type of Simulant	Testing Condition	Surface Area (dm ²)	Volume of Extractant (ml)	Overall Migration (mg/dm ²)	Commission Regulation (EU) No 10/2011 Requirement for Overall Migration Content (mg/dm ²)
1. 10% Ethanol	40 °C, 2 hours	4.67	230	2.6	<10

Based on the above result, the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 88543 73500” sample met the overall migration requirement under Commission Regulation (EU) No 10/2011 – “Plastic materials and articles shall not transfer their constituents to foodstuffs in quantities exceeding 10 milligrams of total constituents released per dm² of food contact surface (mg/dm²) (overall migration limit)”.

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TEST REPORT: 7191203396-CHM19-03-TSL

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SUBJECT

Overall Migration Test for "Powder Free Nitrile Examination Gloves (7.0Mil)" Sample

SAMPLE SUBMISSION DATE

31 Jan 2019

DESCRIPTION OF SAMPLE

One packet of orange color glove sample labelled as follows was received.

No	Description of Gloves	Size	Lot No.	Sample size (Pieces)
1	Powder Free Nitrile Examination Gloves (7.0Mil)	Large	88543 73500	25

DATE OF ANALYSIS

01 Feb 2019 – 18 Feb 2019



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METHOD OF TEST

The sample was analysed for the following tests according to Commission Regulation (EU) No 10/2011:

1. Preparation of Test Specimen

Only the exterior of the glove sample was performed for the test.

2. Overall Migration Content with Aqueous Food Simulant (20% Ethanol)

According to BS EN 1186-9:2002 – Test Methods for overall migration into aqueous food simulants by article filling.

RESULTS

Table 1 : Overall Migration Content with Food Simulant for the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 88543 73500” Sample

Type of Simulant	Testing Condition	Surface Area (dm ²)	Volume of Extractant (ml)	Overall Migration (mg/dm ²)	Commission Regulation (EU) No 10/2011 Requirement for Overall Migration Content (mg/dm ²)
1. 20% Ethanol	40 °C, 2 hours	4.51	230	3.1	<10

Based on the above result, the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 88543 73500” sample met the overall migration requirement under Commission Regulation (EU) No 10/2011 – “Plastic materials and articles shall not transfer their constituents to foodstuffs in quantities exceeding 10 milligrams of total constituents released per dm² of food contact surface (mg/dm²) (overall migration limit)”.



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SAMPLE SUBMISSION DATE

31 Jan 2019

DESCRIPTION OF SAMPLE

One packet of orange color glove sample labelled as follows was received.

No	Description of Gloves	Size	Lot No.	Sample size (Pieces)
1	Powder Free Nitrile Examination Gloves (7.0Mil)	Large	88543 73500	25

DATE OF ANALYSIS

01 Feb 2019 – 18 Feb 2019



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METHOD OF TEST

The sample was analysed for the following tests according to Commission Regulation (EU) No 10/2011:

1. Preparation of Test Specimen

Only the exterior of the glove sample was performed for the test.

2. Overall Migration Content with Aqueous Food Simulant (50% Ethanol)

According to BS EN 1186-9:2002 – Test Methods for overall migration into aqueous food simulants by article filling.

RESULTS

Table 1 : Overall Migration Content with Food Simulant for the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 88543 73500” Sample

Type of Simulant	Testing Condition	Surface Area (dm ²)	Volume of Extractant (ml)	Overall Migration (mg/dm ²)	Commission Regulation (EU) No 10/2011 Requirement for Overall Migration Content (mg/dm ²)
1. 50% Ethanol	40 °C, 2 hours	4.51	230	8.5	<10

Based on the above result, the “Powder Free Nitrile Examination Gloves (7.0Mil), Lot No. 88543 73500” sample met the overall migration requirement under Commission Regulation (EU) No 10/2011 – “Plastic materials and articles shall not transfer their constituents to foodstuffs in quantities exceeding 10 milligrams of total constituents released per dm² of food contact surface (mg/dm²) (overall migration limit)”.

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