

# 455 - Metal Detectable Nitrile Glove Migration Test Report

**Document Number: HSE 7204A**

**Date Of Issue: 28/06/23**

**Revision Number: 1**

**Date of Revision: 28/06/23**



## Subject

Overall migration for 'Metal Detectable Nitrile Examination Powder Free Glove' sample.

## Sample Submission Date

22<sup>nd</sup> February 2023

## Description of Sample

One packet of glove sample labelled as follows was received.

Number	Product Description	Ref No.
1	Metal detectable nitrile examination powder free glove	RA/131/02/2023/D2

## Date of Analysis

27<sup>th</sup> February 2023 – 3<sup>rd</sup> March 2023

**Amendments** This test report 7191304035-CHM23-03-TSL-CR1 was ammended from test report 7191304035-CHM23-03-TSL-CR1 on 28<sup>th</sup> April 2023 as per the clients request to remove the sample photo.

## Method of Test

The sample was analysed for the following tests according to Commision 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 su=imulants by article filling.

## Results

**Table 1** Overall migration content with food simulants for the 'metal detectable nitrile examination powder free glove' sample.

Type of Simulant	Testing Condition <sup>*1</sup>	Surface Area (dm <sup>2</sup> )	Volume of Extractant (ml)	Overall Migration (mg/dm <sup>2</sup> )	Commission Regulation (EU) No 10/2011 Requirement for Overall Migration Content (mg/dm <sup>2</sup> ) <sup>*2</sup>
1 3% Acetic Acid	40°C, 2 hours	5.42	265	4.5	<10

<sup>\*1</sup>The testing conditions were specified by client.

<sup>\*2</sup>Analytical tolerance is 2mg/dm<sup>2</sup> OR 12mg/kg for aqueous simulants and 3mg/dm<sup>2</sup> or 20mg/kg for fatty food simulants.

Based on the above results, the 'metal detectable nitrile examination powder free glove, RA/131/02/2023/D2 met the overall migration requirements under Commission Regulation (EU) No 10/2011 - 'Plastic materials and articles shall not transfer their constituents to food stuffs in quantities exceeding 10 milligrams of total constituents released per dm<sup>2</sup> of food contact surface (mg/dm<sup>2</sup>) (overall migration limit)'.

## Metal Detectable Nitrile Examination Powder Free Glove

**Job Ref No** 2023-05-18-017

**Ref No** RA/220/05/2023/D2

**Date sample received** 18<sup>th</sup> May 2023

**Testing period** 18<sup>th</sup> May 2023 - 26<sup>th</sup> May 2023

### Result Summary

Test Requested	Conclusion
US FDA 21 CFR 177.2600 (Rubber Articles) - Determination of Amount of Extractives	PASS

### Test Results

US FDA 21 CFR 177.2600 (Rubber Articles) - Determination of Amount of Extractives

**Method** With reference to US FDA 21 CFR 177.2600

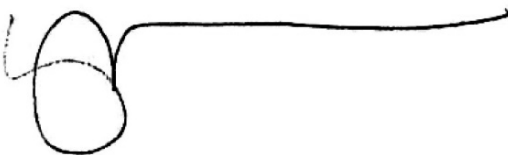
For use in contact with aqueous food.

Extractant	Test Condition	Result (mg/inch <sup>2</sup> )	Reporting Limit (mg/inch <sup>2</sup> )	Permissible Limit (mg/inch <sup>2</sup> )
Distilled Water	Reflux temp for 7 hours	2.2	0.2	20
	Succeeding 2 hours of extraction	0.6	0.2	1
<b>Comment</b>	-	PASS	-	-

Extractant	Test Condition	Result (mg/inch <sup>2</sup> )	Reporting Limit (mg/inch <sup>2</sup> )	Permissible Limit (mg/inch <sup>2</sup> )
n-Hexane	Reflux temp for 7 hours	0.7	0.2	175
	Succeeding 2 hours of extraction	N.D.	0.2	4
<b>Comment</b>	-	PASS	-	-

- Note** 1. mg/inch<sup>2</sup> milligram per square inch  
2. N.D. = Not Detected

No warranty is given or implied with respect to this information or patent infringement. Detectamet Ltd do not accept liability for loss or damage arising from the use of this information. Results are based on a test sample, our general experience and information from our suppliers. Data and results must be confirmed by the buyer by testing for its intended conditions of use.



**Helen Morrison**  
Group Managing Director