

# SHIJIAZHUANG HONGRAY GROUP CO., LTD.

## Summary for Accelerated Aging Shelf Life Testing

### 1.0 Purpose:

Conduct accelerated aging shelf life determination for Nitrile Examination Gloves, Purple-Blue as per EN455-4, so as to determine its shelf life.

### 2.0 Standard:

2.1 EN 455-4: Medical Gloves for Single Use- Part 4 Requirements and Testing for Shelf life determination

2.2 EN 455-1: Medical Gloves for Single Use- Part 1 Requirements and testing for freedom from holes

2.3 EN 455-2: Medical Gloves for Single Use- Part 2 Requirements and testing for physical properties

### 3.0 Samples Information:

Size: M

**Product Name:** Nitrile Examination Gloves, Purple-Blue

**Product Lot No.:** 20101005061XC

20101009071XA

20101017081SB

### 4.0 Instruction of Sampling Testing:

According to EN455-1 and EN455-2, sample gloves individually from three production lots and conduct the following testing and record the testing data under the condition of time zero and accelerated aging for shelf life determination.

Item		Criteria	Quantity and Acceptance Criteria
Length (mm)		$\geq 240\text{mm}$	13 pieces, median
Width (mm)		$95 \pm 10\text{mm}$	13 pieces, median
Thickness (mm)	Middle Fingertip $t_f$	$t_f/t_x \geq 0.9$	13 pieces
	Test piece $t_x$		
Force at Break (N)		$\geq 6\text{N}$	13 pieces, median
Watertightness		---	G-I, AQL1.5, sampling 200 pieces (Ac7, Re 7)
Notes: 1. Condition of sampling testing: Temperature: $23 \pm 2^\circ\text{C}$ , Humidity: $50 \pm 5\%$ 2. Samples shall be conditioned at least 16 hours before testing.			

If all the testing results comply with the criteria requirements, then the lot of products will be accepted. On the contrary, it will be rejected.

### 5.0 Summary for Accelerated Aging Shelf Life Determination Study:

#### 5.1 Time Zero Testing:

5.1.1 Time zero testing were conducted from January 20, 2020. Based on the performance test results, it is showed that the samples meet associate standard requirements, and can be used

normally and accelerated aging shelf life determination study and real time study were started subsequently.

### 5.2 Accelerated Aging Shelf Life Testing:

5.2.1 As per Annex B in EN 455-4, 4 different temperatures and 5-time point at each temperature are used for accelerated aging shelf life testing, and the testing is continued at least 110 days. The selected temperature and days are as follows:

# \ Temp	80°C	70°C	60°C	50°C
1	1 Day	1 Day	5 Days	22 Days
2	2 Days	3 Days	15 Days	35 Days
3	3 Days	7 Days	22 Days	55 Days
4	4 Days	8 Days	35 Days	90 Days
5	5 Days	10 Days	42 Days	110 Days

5.2.2 As per the arrangements in the above table, the actual schedules for each testing are as follows:

Temp \ Testing Period	80°C	70°C	60°C	50°C
	2020.10.10-10.15	2020.10.15-10.25	2020.10.25-12.07	2020.10.10-2021.02.01

5.2.3 The accelerated aging testing was performed as per the above condition and schedule, and based on the accelerated aging performance testing results; it is showed that the samples meet associated standard requirements.

Details for accelerated aging testing for each condition refer to corresponding testing report.

### 5.3 Conclusion for accelerated aging performance testing:

Through the time zero and accelerated aging performance test according to the condition listed in section 5.1 and 5.2 on 3 lots products (namely Lot No: 20101005061XC, 20101009071XA, 20101017081SB as per EN455-1, EN455-2, and EN 455-4, the final performance-testing results of samples conform to associate standard requirements, and the maximum shelf life of Nitrile Examination Gloves determined by accelerated aging testing is 3 years.

Prepared by:  Director of Factory

Date: February 01, 2021

Reviewed by:  Director of Hongray Group

Date: February 01, 2021

# SHIJIAZHUANG HONGRAY GROUP CO., LTD.

## PERFORMANCE TESTING REPORT AT TIME ZERO

### Purpose:

As per EN455-4, carry out performance test at time zero to verify and determine whether the product of Nitrile Examination Gloves, Purple-Blue conform to associate standard requirements, and provide basic data for determining shelf life of the product.

Date Tested: 2020.10.10

### Samples Tested:

Size: M

Product Name: Nitrile Examination Gloves, Purple-Blue

Product Lot No.: 20101005061XC

20101005071XC

20101017081SB

### Standards:

EN 455-4: Medical Gloves for Single Use- Part 4 Requirements and Testing for Shelf life determination

EN 455-1: Medical Gloves for Single Use- Part 1 Requirements and testing for freedom from holes

EN 455-2: Medical Gloves for Single Use- Part 2 Requirements and testing for physical properties

**The detailed testing results of the samples above-mentioned are as follows:**

### **I. PERFORMANCE TESTING RESULT AT TIME ZERO OF LOT NO. 20101005061XC:**

#### **1. PERFORMANCE TESTING AT TIME ZERO----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Conditioning: At least 16 hours

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	96	6.4
2	M	238	0.06	0.07	97	6.4
3	M	240	0.06	0.08	96	6.3
4	M	238	0.06	0.08	97	6.2
5	M	241	0.06	0.08	97	6.2
6	M	233	0.06	0.08	96	6.1
7	M	241	0.06	0.08	97	6.0
8	M	241	0.06	0.08	97	5.9
9	M	240	0.06	0.08	97	5.8
10	M	242	0.06	0.07	97	5.7

11	M	235	0.06	0.08	97	5.7
12	M	240	0.06	0.08	97	5.6
13	M	242	0.06	0.08	97	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

## 2. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

## 3. FINAL RESULTS of LOT NO. 20101005061XC:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

## II. PERFORMANCE TESTING RESULT AT TIME ZERO OF LOT NO. 20101005071XC

### 1. PERFORMANCE TESTING AT TIME ZERO----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded results for force at break shall conform to the values of at least 6N.

Conditioning: At least 16 hours

Tested by: Du Suxia Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	239	0.06	0.08	96	6.3
2	M	240	0.06	0.07	97	6.3
3	M	242	0.06	0.08	97	6.2
4	M	240	0.06	0.08	97	6.2
5	M	240	0.06	0.08	96	6.1
6	M	242	0.06	0.08	96	6.1
7	M	242	0.06	0.08	97	6.0
8	M	242	0.06	0.08	97	5.9
9	M	233	0.06	0.08	96	5.8
10	M	239	0.06	0.08	97	5.8
11	M	234	0.06	0.08	97	5.7
12	M	242	0.06	0.08	96	5.6
13	M	238	0.06	0.07	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the It is It is It is showed from the above data that the performance testing of samples conform to the

specification (Force at Break  $\geq 6N$ ).

## 2. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

## 3. FINAL RESULTS of LOT NO. 20101005071XC:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

## III. PERFORMANCE TESTING RESULT AT TIME ZERO OF LOT NO. 20101017081SB

### 1. PERFORMANCE TESTING AT TIME ZERO ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded results for force at break shall conform to the values of at least 6N.

Conditioning: At least 16 hours

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.07	97	6.4
2	M	245	0.06	0.07	97	6.3
3	M	243	0.06	0.08	96	6.2
4	M	236	0.06	0.08	96	6.2
5	M	240	0.06	0.08	96	6.1
6	M	245	0.06	0.08	97	6.1
7	M	236	0.06	0.07	97	6.1
8	M	232	0.06	0.08	97	5.9
9	M	241	0.06	0.08	96	5.8
10	M	242	0.06	0.08	97	5.8
11	M	248	0.06	0.08	96	5.7
12	M	243	0.06	0.08	97	5.7
13	M	235	0.06	0.08	97	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

## 2. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### 3. FINAL RESULTS of LOT NO. 20101017081SB:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### IV. FINAL RESULT FOR PERFORMANCE TESTING AT TIME ZERO:

Through the performance test at time zero on 3 lots products (Lot No: 20101005061XC, 20101005071XC, 20101017081SB) as per EN455-1, EN455-2, and EN 455-4, the final performance-testing results of samples conform to associate standard requirements, and can be used normally.

Prepared by:  Director of Factory

Date: October 10, 2020

Reviewed by:  / QA Director of Hongray Group

Date: October 10, 2020

# SHIJIAZHUANG HONGRAY GROUP CO., LTD.

## PERFORMANCE TESTING REPORT @ 80°C FOR 5 TIME POINT

### Purpose:

As per EN455-4, carry out accelerated aging property test at 80°C for 5-time point (namely 1 day, 2 days, 3 days, 4 days, and 5 days) to verify and determine the shelf-life of Nitrile Examination Gloves, Purple-Blue.

**Date Tested:** 2020.10.10-10.15

### Samples Tested:

Size: M

**Product Name:** Nitrile Examination Gloves, Purple-Blue

**Product Lot No.:** 20101005061XC

20101009071XA

20101017081SB

### Standards:

EN 455-4: Medical Gloves for Single Use- Part 4 Requirements and Testing for Shelf life determination

EN 455-1: Medical Gloves for Single Use- Part 1 Requirements and testing for freedom from holes

EN 455-2: Medical Gloves for Single Use- Part 2 Requirements and testing for physical properties

**The detailed testing results of the samples above-mentioned are as follows:**

### **I. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 80°C OF LOT NO. 20101005061XC**

#### **1. Accelerated Aging Condition: 80°C@ 1 day      Conditioning: At least 16 hours**

A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	235	0.06	0.08	97	6.3
2	M	241	0.06	0.08	97	6.3
3	M	240	0.06	0.08	97	6.2
4	M	245	0.06	0.08	96	6.2
5	M	240	0.06	0.08	97	6.1
6	M	234	0.06	0.07	96	6.1
7	M	241	0.06	0.08	97	6.0
8	M	240	0.06	0.08	97	6.0
9	M	239	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9

11	M	240	0.06	0.08	96	5.8
12	M	241	0.06	0.07	97	5.7
13	M	240	0.06	0.08	97	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 80°C @ 1 DAY:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### **2. Accelerated Aging Condition: 80°C @ 2 days      Conditioning: At least 16 hours**

##### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 20°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	97	6.4
2	M	240	0.06	0.08	97	6.3
3	M	240	0.06	0.08	96	6.2
4	M	243	0.06	0.08	96	6.2
5	M	243	0.06	0.08	97	6.1
6	M	240	0.06	0.08	97	6.1
7	M	238	0.06	0.08	96	6.0
8	M	240	0.06	0.08	96	6.0
9	M	235	0.06	0.07	97	6.0
10	M	240	0.06	0.08	96	5.9
11	M	246	0.06	0.08	97	5.8
12	M	234	0.06	0.07	96	5.7
13	M	235	0.06	0.08	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C @ 2 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 80°C @ 3 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	244	0.06	0.08	96	6.4
2	M	241	0.06	0.08	97	6.3
3	M	242	0.06	0.08	97	6.2
4	M	240	0.06	0.08	97	6.2
5	M	240	0.06	0.08	96	6.1
6	M	235	0.06	0.07	96	6.1
7	M	234	0.06	0.08	97	6.0
8	M	241	0.06	0.08	97	6.0
9	M	240	0.06	0.08	96	6.0
10	M	246	0.06	0.08	97	5.8
11	M	240	0.06	0.08	97	5.8
12	M	241	0.06	0.07	96	5.7
13	M	240	0.06	0.08	97	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break ≥6N).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C @ 3 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can

be used normally.

**4. Accelerated Aging Condition: 80°C @ 4 days      Conditioning: At least 16 hours**

A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 53%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.3
2	M	240	0.06	0.08	97	6.3
3	M	240	0.06	0.07	96	6.2
4	M	242	0.06	0.08	97	6.2
5	M	245	0.06	0.08	97	6.2
6	M	242	0.06	0.07	96	6.0
7	M	237	0.06	0.08	97	6.0
8	M	234	0.06	0.08	97	6.0
9	M	240	0.06	0.08	97	6.0
10	M	242	0.06	0.08	97	5.9
11	M	242	0.06	0.08	97	5.7
12	M	240	0.06	0.07	96	5.7
13	M	240	0.06	0.08	97	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C @ 4 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**5. Accelerated Aging Condition: 80°C @ 5 days      Conditioning: At least 16 hours**

A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length	Thickness (mm)	Palm	Force at
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		(mm)	Test Piece	Middle Fingertip	Width (mm)	Break (N)
1	M	242	0.06	0.08	97	6.3
2	M	235	0.06	0.07	96	6.3
3	M	240	0.06	0.08	97	6.2
4	M	236	0.06	0.08	97	6.2
5	M	240	0.06	0.08	96	6.1
6	M	245	0.06	0.07	96	6.1
7	M	231	0.06	0.08	97	6.0
8	M	240	0.06	0.08	97	6.0
9	M	240	0.06	0.08	96	6.0
10	M	242	0.06	0.08	97	5.9
11	M	240	0.06	0.08	97	5.8
12	M	240	0.06	0.07	97	5.7
13	M	241	0.06	0.08	96	5.7
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 80°C @ 5 DAYS:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### 6. FINAL RESULTS of LOT NO. 20101005061XC :

Final performance-testing results of samples at conditions of 80°C@ 1 day, 80°C@ 2 days, 80°C@ 3 days, 80°C@ 4 days, 80°C@ 5 days conform to associate standard requirements, and can be used normally.

## II. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 80°C OF LOT NO. 20101009071XA

### 1. Accelerated Aging Condition: 80°C @ 1 day Conditioning: At least 16 hours

#### A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 51%

Serial No.	Size	Length	Thickness (mm)	Palm	Force at
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		(mm)	Test Piece	Middle Fingertip	Width (mm)	Break (N)
1	M	242	0.06	0.08	97	6.3
2	M	241	0.06	0.08	97	6.3
3	M	240	0.06	0.08	96	6.3
4	M	237	0.06	0.08	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	240	0.06	0.07	96	6.0
7	M	241	0.06	0.08	97	6.0
8	M	245	0.06	0.08	96	6.0
9	M	235	0.06	0.08	96	6.0
10	M	238	0.06	0.08	96	5.8
11	M	240	0.06	0.08	97	5.8
12	M	241	0.06	0.07	97	5.7
13	M	240	0.06	0.08	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 80°C @ 1 DAY:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### **2. Accelerated Aging Condition: 80°C @ 2 days      Conditioning: At least 16 hours**

A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	96	6.3
2	M	240	0.06	0.08	97	6.3
3	M	240	0.06	0.08	97	6.2
4	M	242	0.06	0.08	96	6.2
5	M	240	0.06	0.08	96	6.1
6	M	243	0.06	0.07	97	6.1

7	M	250	0.06	0.08	97	6.0
8	M	235	0.06	0.08	97	6.0
9	M	245	0.06	0.08	97	6.0
10	M	240	0.06	0.07	96	5.8
11	M	234	0.06	0.08	97	5.8
12	M	243	0.06	0.07	96	5.7
13	M	240	0.06	0.08	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C@ 2 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 80°C @ 3 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	237	0.06	0.08	96	6.3
2	M	240	0.06	0.08	96	6.2
3	M	240	0.06	0.08	97	6.2
4	M	242	0.06	0.08	96	6.2
5	M	243	0.06	0.08	97	6.1
6	M	241	0.06	0.07	96	6.1
7	M	240	0.06	0.08	96	6.0
8	M	235	0.06	0.08	97	6.0
9	M	240	0.06	0.08	97	6.0
10	M	235	0.06	0.08	97	5.8
11	M	242	0.06	0.08	97	5.8
12	M	234	0.06	0.07	96	5.7
13	M	240	0.06	0.08	97	5.6

Median Value	6.1
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It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C @ 3 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**4. Accelerated Aging Condition: 80°C @ 4 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	96	6.3
2	M	240	0.06	0.08	97	6.3
3	M	240	0.06	0.08	97	6.2
4	M	234	0.06	0.08	97	6.2
5	M	242	0.06	0.08	96	6.1
6	M	248	0.06	0.07	97	6.1
7	M	240	0.06	0.08	97	6.0
8	M	235	0.06	0.08	96	6.0
9	M	240	0.06	0.08	97	6.0
10	M	237	0.06	0.08	97	5.9
11	M	241	0.06	0.08	96	5.7
12	M	236	0.06	0.07	97	5.7
13	M	242	0.06	0.08	97	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C @ 4 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**5. Accelerated Aging Condition: 80°C @ 5 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----**Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 50%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	97	6.3
2	M	240	0.06	0.08	96	6.3
3	M	242	0.06	0.08	96	6.2
4	M	237	0.06	0.08	97	6.2
5	M	242	0.06	0.08	96	6.1
6	M	242	0.06	0.07	96	6.1
7	M	240	0.06	0.08	97	6.1
8	M	240	0.06	0.08	96	6.0
9	M	232	0.06	0.08	96	6.0
10	M	250	0.06	0.08	97	5.9
11	M	242	0.06	0.08	96	5.8
12	M	234	0.06	0.07	96	5.7
13	M	240	0.06	0.08	96	5.7
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq$ 6N).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C @ 5 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101009071XA :**

Final performance-testing results of samples at conditions of 80°C@ 1 day, 80°C@2 days, 80°C@ 3 days, 80°C@ 4 days, 80°C@ 5 days conform to associate standard requirements, and can be used normally.

### III. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 80°C OF LOT NO. 20101017081SB

#### 1. Accelerated Aging Condition: 80°C @ 1 day Conditioning: At least 16 hours

A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties  
Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 53%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	243	0.06	0.08	96	6.3
2	M	240	0.06	0.08	96	6.3
3	M	244	0.06	0.08	97	6.2
4	M	240	0.06	0.08	97	6.2
5	M	242	0.06	0.08	97	6.1
6	M	240	0.06	0.07	97	6.1
7	M	241	0.06	0.08	97	6.0
8	M	240	0.06	0.08	96	6.0
9	M	234	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9
11	M	241	0.06	0.08	97	5.8
12	M	240	0.06	0.08	96	5.7
13	M	242	0.06	0.08	97	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

#### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

#### C. TESTING RESULTS AT 80°C @ 1 DAY:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### 2. Accelerated Aging Condition: 80°C @ 2 days Conditioning: At least 16 hours

A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	243	0.06	0.08	97	6.3
2	M	240	0.06	0.08	97	6.3
3	M	242	0.06	0.08	96	6.2
4	M	240	0.06	0.08	96	6.2
5	M	241	0.06	0.08	97	6.1
6	M	237	0.06	0.07	97	6.1
7	M	244	0.06	0.08	96	6.0
8	M	241	0.06	0.08	97	6.0
9	M	240	0.06	0.08	96	6.0
10	M	242	0.06	0.08	97	5.9
11	M	242	0.06	0.08	97	5.8
12	M	240	0.06	0.07	97	5.7
13	M	235	0.06	0.08	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C @ 2 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 80°C @ 3 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	96	6.3

2	M	240	0.06	0.07	97	6.3
3	M	242	0.06	0.08	97	6.2
4	M	240	0.06	0.08	97	6.2
5	M	242	0.06	0.08	97	6.1
6	M	241	0.06	0.07	96	6.1
7	M	242	0.06	0.08	96	6.1
8	M	240	0.06	0.08	96	6.0
9	M	242	0.06	0.08	96	6.0
10	M	235	0.06	0.08	97	5.9
11	M	239	0.06	0.08	97	5.8
12	M	240	0.06	0.07	97	5.7
13	M	230	0.06	0.08	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 80°C @ 3 DAYS:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### 4. Accelerated Aging Condition: 80°C @ 4 days Conditioning: At least 16 hours

A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 50%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.3
2	M	239	0.06	0.08	97	6.3
3	M	240	0.06	0.08	97	6.2
4	M	242	0.06	0.08	97	6.2
5	M	243	0.06	0.08	96	6.1
6	M	240	0.06	0.07	96	6.1
7	M	241	0.06	0.08	97	6.0
8	M	240	0.06	0.08	96	6.0
9	M	242	0.06	0.08	97	6.0

10	M	241	0.06	0.08	97	5.9
11	M	244	0.06	0.08	97	5.8
12	M	240	0.06	0.07	96	5.7
13	M	243	0.06	0.07	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 80°C @ 4 DAYS:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### **5. Accelerated Aging Condition: 80°C @ 5 days      Conditioning: At least 16 hours**

A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.07	97	6.3
2	M	240	0.06	0.08	96	6.3
3	M	242	0.06	0.08	97	6.2
4	M	238	0.06	0.08	97	6.2
5	M	241	0.06	0.08	96	6.1
6	M	240	0.06	0.07	96	6.1
7	M	244	0.06	0.08	96	6.0
8	M	240	0.06	0.08	97	6.0
9	M	242	0.06	0.08	96	6.0
10	M	234	0.06	0.08	96	5.9
11	M	243	0.06	0.08	97	5.8
12	M	240	0.06	0.08	97	5.7
13	M	241	0.06	0.08	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	3

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 80°C @ 5 DAYS:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101017081SB:**

Final performance-testing results of samples at conditions of 80°C@ 1 day, 80°C@ 2 days, 80°C@ 3 days, 80°C @ 4 days, 80°C @ 5 days conform to associate standard requirements, and can be used normally.

**IV. FINAL RESULT FOR ACCELERATED AGING PERFORMANCE TESTING RESULT AT 80°C:**

Through the accelerated aging performance test at 80°C@ 1 day, 80°C@ 2 days, 80°C @3 days, 80°C @ 4 days, 80°C @ 5 days on 3 lots products (Lot No: 20101005061XC, 20101009071XA, 20101017081SB) as per EN455-1, EN455-2, and EN 455-4, the final performance-testing results of samples conform to associate standard requirements, and can be used normally.

Prepared by:  Director of Factory

Date: October 15, 2020

Reviewed by:  QA Director of Hongray Group

Date: October 15, 2020

# SHIJIAZHUANG HONGRAY GROUP

## PERFORMANCE TESTING REPORT @ 70°C FOR 5 TIME POINT

### **Purpose:**

As per EN455-4, carry out accelerated aging property test at 70°C for 5-time point (namely 1 day, 3 days, 7 days, 8 days, and 10 days) to verify and determine the shelf-life of Nitrile Examination Gloves, Purple-Blue.

**Date Tested:** 2020.10.15-10.25

### **Samples Tested:**

Size: M

**Product Name:** Nitrile Examination Gloves, Purple-Blue

**Product Lot No.:** 20101005061XC

20101005071XC

20101005081XC

### **Standards:**

EN 455-4: Medical Gloves for Single Use- Part 4 Requirements and Testing for Shelf life determination

EN 455-1: Medical Gloves for Single Use- Part 1 Requirements and testing for freedom from holes

EN 455-2: Medical Gloves for Single Use- Part 2 Requirements and testing for physical properties

**The detailed testing results of the samples above-mentioned are as follows:**

## **I. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 70°C OF LOT NO. 20101005061XC**

### **1. Accelerated Aging Condition: 70°C@ 1 day      Conditioning: At least 16 hours**

#### **A. Accelerated aging performance testing ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	97	6.2
2	M	245	0.06	0.08	97	6.4
3	M	241	0.06	0.07	97	6.3
4	M	235	0.06	0.08	97	6.4
5	M	241	0.06	0.08	96	6.4
6	M	242	0.06	0.08	96	6.3
7	M	240	0.06	0.08	97	6.1
8	M	230	0.06	0.07	97	6.0
9	M	240	0.06	0.08	97	6.0
10	M	241	0.06	0.08	97	6.0

11	M	232	0.06	0.08	96	5.9
12	M	241	0.06	0.07	97	5.8
13	M	243	0.06	0.08	97	5.8
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 70°C @ 1 DAY:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### **2. Accelerated Aging Condition: 70°C @ 3 days      Conditioning: At least 16 hours**

#### A. Accelerated aging performance testing ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 20°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	238	0.06	0.08	96	6.5
2	M	243	0.06	0.08	97	6.4
3	M	248	0.06	0.07	97	6.3
4	M	230	0.06	0.08	97	6.2
5	M	240	0.06	0.08	97	6.2
6	M	245	0.06	0.08	96	6.2
7	M	241	0.06	0.08	97	6.1
8	M	245	0.06	0.08	97	6.0
9	M	233	0.06	0.08	97	5.9
10	M	242	0.06	0.08	96	5.8
11	M	240	0.06	0.08	97	5.7
12	M	237	0.06	0.07	97	5.7
13	M	242	0.06	0.08	97	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 70°C @ 3 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 70°C @ 7 days      Conditioning: At least 16 hours**

**A. Accelerated aging performance testing ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	97	6.4
2	M	235	0.06	0.08	97	6.3
3	M	240	0.06	0.07	96	6.2
4	M	241	0.06	0.08	97	6.2
5	M	245	0.06	0.08	97	6.1
6	M	250	0.06	0.08	96	6.1
7	M	245	0.06	0.08	96	6.1
8	M	240	0.06	0.07	96	6.0
9	M	243	0.06	0.08	96	5.9
10	M	235	0.06	0.08	97	5.7
11	M	245	0.06	0.08	97	5.7
12	M	240	0.06	0.07	96	5.7
13	M	236	0.06	0.08	97	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break ≥6N).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 70°C @ 7 days:**

Final performance-testing results of samples conform to associate standard requirements, and can

be used normally.

**4. Accelerated Aging Condition: 70°C @ 8 days      Conditioning: At least 16 hours**

**A. Accelerated aging performance testing ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.6
2	M	230	0.06	0.08	96	6.5
3	M	245	0.06	0.08	97	6.5
4	M	240	0.06	0.08	97	6.4
5	M	236	0.06	0.08	96	6.4
6	M	242	0.06	0.08	96	6.3
7	M	242	0.06	0.08	97	6.2
8	M	245	0.06	0.07	96	6.1
9	M	235	0.06	0.08	96	6.0
10	M	246	0.06	0.08	97	6.0
11	M	240	0.06	0.08	96	5.9
12	M	240	0.06	0.07	97	5.8
13	M	245	0.06	0.08	97	5.8
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 70°C @ 8 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**5. Accelerated Aging Condition: 70°C @ 10 days      Conditioning: At least 16 hours**

**A. Accelerated aging performance testing ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length	Thickness (mm)	Palm	Force at
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		(mm)	Test Piece	Middle Fingertip	Width (mm)	Break (N)
1	M	243	0.06	0.08	97	6.6
2	M	241	0.06	0.08	96	6.5
3	M	247	0.06	0.07	96	6.5
4	M	245	0.06	0.08	96	6.4
5	M	245	0.06	0.08	97	6.4
6	M	235	0.06	0.08	96	6.3
7	M	242	0.06	0.08	97	6.2
8	M	248	0.06	0.07	96	6.1
9	M	237	0.06	0.08	96	6.0
10	M	242	0.06	0.08	97	6.0
11	M	251	0.06	0.08	97	5.9
12	M	230	0.06	0.07	96	5.8
13	M	240	0.06	0.07	97	5.8
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 70°C @ 10 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### 6. FINAL RESULTS of LOT NO. 20101005061XC :

Final performance-testing results of samples at conditions of 70°C@ 1 day, 70°C@ 3 days, 70°C@ 7 days, 70°C@ 8 days, 70°C@ 10 days conform to associate standard requirements, and can be used normally.

## II. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 70°C OF LOT NO. 20101005071XC

### 1. Accelerated Aging Condition: 70°C @ 1 day      Conditioning: At least 16 hours

#### A. Accelerated aging performance testing---Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		

1	M	242	0.06	0.08	97	6.6
2	M	244	0.06	0.08	97	6.5
3	M	241	0.06	0.07	96	6.5
4	M	241	0.06	0.08	97	6.4
5	M	243	0.06	0.08	97	6.4
6	M	234	0.06	0.08	96	6.3
7	M	246	0.06	0.08	97	6.2
8	M	240	0.06	0.07	97	6.1
9	M	240	0.06	0.08	96	6.0
10	M	242	0.06	0.08	97	6.0
11	M	231	0.06	0.08	96	5.9
12	M	242	0.06	0.07	97	5.8
13	M	235	0.06	0.08	97	5.8
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 70°C @ 1 DAY:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### 2. Accelerated Aging Condition: 70°C @ 3 days      Conditioning: At least 16 hours

#### A. Accelerated aging performance testing ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	237	0.06	0.08	97	6.6
2	M	245	0.06	0.08	97	6.5
3	M	235	0.06	0.07	96	6.5
4	M	241	0.06	0.08	96	6.4
5	M	230	0.06	0.08	97	6.4
6	M	241	0.06	0.08	97	6.3
7	M	245	0.06	0.08	97	6.2
8	M	243	0.06	0.07	97	6.1

9	M	255	0.06	0.08	96	6.0
10	M	245	0.06	0.08	97	6.0
11	M	246	0.06	0.08	97	5.8
12	M	240	0.06	0.07	97	5.7
13	M	236	0.06	0.08	97	5.7
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 70°C@ 3 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

## **3. Accelerated Aging Condition: 70°C @ 7 days      Conditioning: At least 16 hours**

### A. Accelerated aging performance testing ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	245	0.06	0.08	97	6.6
2	M	240	0.06	0.08	97	6.5
3	M	241	0.06	0.07	97	6.5
4	M	237	0.06	0.08	96	6.4
5	M	242	0.06	0.08	96	6.4
6	M	242	0.06	0.07	97	6.3
7	M	241	0.06	0.08	96	6.1
8	M	245	0.06	0.08	97	6.1
9	M	241	0.06	0.08	96	6.0
10	M	240	0.06	0.08	97	6.0
11	M	240	0.06	0.08	96	5.9
12	M	243	0.06	0.07	96	5.8
13	M	230	0.06	0.08	97	5.7
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the

specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	3

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 70°C @ 7 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**4. Accelerated Aging Condition: 70°C @ 8 days Conditioning: At least 16 hours**

**A. Accelerated aging performance testing ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	245	0.06	0.07	97	6.6
2	M	240	0.06	0.08	97	6.5
3	M	242	0.06	0.07	96	6.4
4	M	237	0.06	0.08	96	6.4
5	M	240	0.06	0.08	96	6.4
6	M	232	0.06	0.08	97	6.3
7	M	240	0.06	0.08	96	6.2
8	M	240	0.06	0.07	97	6.1
9	M	242	0.06	0.08	97	6.0
10	M	235	0.06	0.08	96	6.0
11	M	240	0.06	0.08	97	5.9
12	M	239	0.06	0.07	97	5.7
13	M	242	0.06	0.08	97	5.6
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 70°C @ 8 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**5. Accelerated Aging Condition: 70°C @ 10 days Conditioning: At least 16 hours**

**A. Accelerated aging performance testing ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 50%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	245	0.06	0.08	96	6.6
2	M	235	0.06	0.08	96	6.5
3	M	242	0.06	0.07	97	6.4
4	M	240	0.06	0.08	97	6.4
5	M	240	0.06	0.08	96	6.4
6	M	240	0.06	0.08	97	6.3
7	M	242	0.06	0.07	96	6.2
8	M	242	0.06	0.07	96	6.1
9	M	231	0.06	0.08	97	6.0
10	M	241	0.06	0.08	97	6.0
11	M	245	0.06	0.08	97	5.9
12	M	235	0.06	0.07	97	5.8
13	M	236	0.06	0.08	97	5.7
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break ≥6N).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 70°C @ 10 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101005071XC :**

Final performance-testing results of samples at conditions of 70°C@ 1 day, 70°C@3 days, 70°C@ 7 days, 70°C@ 8 days, 70°C@ 10 days conform to associate standard requirements, and can be used normally.

### III. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 70°C OF LOT NO. 20101005081XC

#### 1. Accelerated Aging Condition: 70°C @ 1 day      Conditioning: At least 16 hours

##### A. Accelerated aging performance testing ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 53%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	234	0.06	0.08	97	6.6
2	M	241	0.06	0.08	97	6.5
3	M	240	0.06	0.07	96	6.5
4	M	244	0.06	0.08	97	6.4
5	M	240	0.06	0.08	96	6.4
6	M	232	0.06	0.08	96	6.3
7	M	240	0.06	0.08	97	6.2
8	M	234	0.06	0.07	97	6.1
9	M	242	0.06	0.08	97	6.0
10	M	240	0.06	0.08	96	6.0
11	M	240	0.06	0.08	96	5.9
12	M	238	0.06	0.08	97	5.8
13	M	240	0.06	0.08	97	5.8
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

##### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

##### C. TESTING RESULTS AT 70°C @ 1 DAY:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### 2. Accelerated Aging Condition: 70°C @ 3 days      Conditioning: At least 16 hours

##### A. Accelerated aging performance testing ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 20°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.6
2	M	240	0.06	0.08	97	6.6
3	M	241	0.06	0.07	97	6.5
4	M	235	0.06	0.08	96	6.4
5	M	241	0.06	0.07	96	6.4
6	M	240	0.06	0.08	97	6.3
7	M	243	0.06	0.08	97	6.2
8	M	242	0.06	0.07	97	6.1
9	M	234	0.06	0.08	97	6.0
10	M	241	0.06	0.08	97	6.0
11	M	239	0.06	0.08	96	5.9
12	M	240	0.06	0.07	97	5.8
13	M	244	0.06	0.08	97	5.8
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 70°C @ 3 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 70°C @ 7 days      Conditioning: At least 16 hours**

**A. Accelerated aging performance testing ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	97	6.5
2	M	240	0.06	0.08	96	6.5
3	M	237	0.06	0.08	96	6.5
4	M	242	0.06	0.08	97	6.4

5	M	244	0.06	0.08	97	6.4
6	M	240	0.06	0.08	96	6.3
7	M	240	0.06	0.08	97	6.1
8	M	241	0.06	0.07	96	6.1
9	M	243	0.06	0.08	97	6.0
10	M	237	0.06	0.08	96	6.0
11	M	242	0.06	0.08	96	5.9
12	M	240	0.06	0.07	97	5.8
13	M	242	0.06	0.08	97	5.8
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 70°C @ 7 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### **4. Accelerated Aging Condition: 70°C @ 8 days      Conditioning: At least 16 hours**

#### A. Accelerated aging performance testing ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 22°C, 50%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	97	6.6
2	M	240	0.06	0.08	97	6.5
3	M	244	0.06	0.07	96	6.4
4	M	240	0.06	0.08	96	6.4
5	M	240	0.06	0.08	97	6.4
6	M	240	0.06	0.08	96	6.3
7	M	240	0.06	0.08	96	6.2
8	M	237	0.06	0.08	97	6.1
9	M	240	0.06	0.08	97	6.0
10	M	235	0.06	0.08	96	6.0
11	M	240	0.06	0.08	97	5.9
12	M	239	0.06	0.07	97	5.8

13	M	240	0.06	0.08	97	5.7
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	3

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 70°C @ 8 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

## **5. Accelerated Aging Condition: 70°C @ 10 days      Conditioning: At least 16 hours**

### A. Accelerated aging performance testing ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.07	97	6.5
2	M	235	0.06	0.08	96	6.5
3	M	240	0.06	0.07	96	6.5
4	M	241	0.06	0.08	97	6.4
5	M	240	0.06	0.08	96	6.4
6	M	244	0.06	0.08	96	6.3
7	M	240	0.06	0.08	97	6.2
8	M	241	0.06	0.07	96	6.1
9	M	242	0.06	0.08	96	6.0
10	M	239	0.06	0.08	97	6.0
11	M	240	0.06	0.08	97	5.9
12	M	235	0.06	0.07	96	5.8
13	M	242	0.06	0.08	97	5.8
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 70°C @ 10 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101005081XC:**

Final performance-testing results of samples at conditions of 70°C@ 1 day, 70°C@ 3 days, 70°C@ 7 days, 70°C @ 8 days, 70°C @ 10 days conform to associate standard requirements, and can be used normally.

**IV. FINAL RESULT FOR ACCELERATED AGING PERFORMANCE TESTING RESULT AT 70°C:**

Through the accelerated aging performance test at 70°C@ 1 day, 70°C@ 3 days, 70°C @7 days, 70°C @ 8 days, 70°C @ 10 days on 3 lots products (Lot No: 20101005061XC, 20101005071XC, 20101005081XC) as per EN455-1, EN455-2, and EN 455-4, the final performance-testing results of samples conform to associate standard requirements, and can be used normally.

Prepared by:  Director of Factory

Date: October 25, 2020

Reviewed by:  / QA Director of Hongray Group

Date: October 25, 2020

# SHIJIAZHANG HONGRAY GROUP CO., LTD.

## PERFORMANCE TESTING REPORT @ 60°C FOR 5 TIME POINT

### Purpose:

As per EN455-4, carry out accelerated aging property test at 60°C for 5-time point (namely 5 days, 15 days, 22 days, 35 days, and 42 days) to verify and determine the shelf-life of Nitrile Examination Gloves, Purple-Blue.

**Date Tested:** 2020.10.25-12.07

### Samples Tested:

Size: M

**Product Name:** Nitrile Examination Gloves, Purple-Blue

**Product Lot No.:** 20101005061XC  
20101009071XA  
20101017081SB

### Standards:

EN 455-4: Medical Gloves for Single Use- Part 4 Requirements and Testing for Shelf life determination

EN 455-1: Medical Gloves for Single Use- Part 1 Requirements and testing for freedom from holes

EN 455-2: Medical Gloves for Single Use- Part 2 Requirements and testing for physical properties

**The detailed testing results of the samples above-mentioned are as follows:**

### **I. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 60°C OF LOT NO. 20101005061XC**

**I. Accelerated Aging Condition: 60°C@ 5 days      Conditioning: At least 16 hours**

A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 50%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	97	6.3
2	M	240	0.06	0.07	97	6.4
3	M	237	0.06	0.08	97	6.3
4	M	240	0.06	0.08	97	6.2
5	M	230	0.06	0.08	97	6.1
6	M	244	0.06	0.08	96	6.1
7	M	242	0.06	0.08	97	6.0
8	M	241	0.06	0.07	96	6.0
9	M	235	0.06	0.08	97	6.0
10	M	240	0.06	0.08	96	5.9
11	M	245	0.06	0.08	97	5.8

12	M	237	0.06	0.08	97	5.7
13	M	242	0.06	0.07	96	5.7
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 60°C @ 5 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### **2. Accelerated Aging Condition: 60°C @ 15 days      Conditioning: At least 16 hours**

##### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 50%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	231	0.06	0.08	96	6.5
2	M	240	0.06	0.07	97	6.3
3	M	245	0.06	0.08	97	6.2
4	M	241	0.06	0.07	97	6.2
5	M	238	0.06	0.08	96	6.1
6	M	244	0.06	0.08	97	6.1
7	M	242	0.06	0.08	97	6.1
8	M	238	0.06	0.07	97	6.0
9	M	245	0.06	0.08	96	6.0
10	M	242	0.06	0.08	97	5.9
11	M	245	0.06	0.08	97	5.8
12	M	245	0.06	0.08	97	5.7
13	M	236	0.06	0.07	97	5.7
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 15 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 60°C @ 22 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	237	0.06	0.08	97	6.4
2	M	240	0.06	0.07	97	6.3
3	M	242	0.06	0.08	96	6.2
4	M	231	0.06	0.08	96	6.2
5	M	245	0.06	0.08	97	6.1
6	M	240	0.06	0.07	97	6.0
7	M	240	0.06	0.08	97	6.1
8	M	244	0.06	0.07	97	6.0
9	M	240	0.06	0.08	96	6.0
10	M	241	0.06	0.08	96	5.8
11	M	242	0.06	0.08	97	5.8
12	M	240	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.7
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break ≥6N).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 22 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**4. Accelerated Aging Condition: 60°C @ 35 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----**Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	97	6.4
2	M	240	0.06	0.07	97	6.3
3	M	242	0.06	0.08	96	6.2
4	M	241	0.06	0.08	96	6.2
5	M	240	0.06	0.08	97	6.1
6	M	240	0.06	0.08	97	6.1
7	M	240	0.06	0.08	97	6.0
8	M	234	0.06	0.07	97	6.0
9	M	239	0.06	0.08	96	6.0
10	M	240	0.06	0.08	96	5.9
11	M	242	0.06	0.08	97	5.8
12	M	237	0.06	0.08	97	5.7
13	M	240	0.06	0.08	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 35 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**5. Accelerated Aging Condition: 60°C @ 42 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----**Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length	Thickness (mm)	Palm	Force at
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		(mm)	Test Piece	Middle Fingertip	Width (mm)	Break (N)
1	M	245	0.06	0.08	96	6.4
2	M	250	0.06	0.07	97	6.3
3	M	245	0.06	0.08	97	6.2
4	M	241	0.06	0.08	99	6.2
5	M	245	0.06	0.08	96	6.1
6	M	242	0.06	0.08	99	6.1
7	M	235	0.06	0.08	97	6.1
8	M	252	0.06	0.08	95	6.0
9	M	233	0.06	0.08	97	6.0
10	M	245	0.06	0.08	95	5.9
11	M	230	0.06	0.08	98	5.8
12	M	242	0.06	0.08	96	5.7
13	M	240	0.06	0.07	99	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 42 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101005061XC:**

Final performance-testing results of samples at conditions of 60°C@ 5 days, 60°C@ 15 days, 60°C@ 22 days, 60°C@ 35 days, 60°C@ 42 days conform to associate standard requirements, and can be used normally.

**II. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 60°C OF LOT NO. 20101009071XA**

**1. Accelerated Aging Condition: 60°C @ 5 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 21.5°C, 50%

Serial No.	Size	Length	Thickness (mm)	Palm	Force at
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		(mm)	Test Piece	Middle Fingertip	Width (mm)	Break (N)
1	M	241	0.06	0.08	97	6.4
2	M	230	0.06	0.07	97	6.4
3	M	234	0.06	0.08	96	6.2
4	M	245	0.06	0.08	97	6.2
5	M	236	0.06	0.07	97	6.1
6	M	240	0.06	0.08	97	6.1
7	M	248	0.06	0.08	97	6.1
8	M	240	0.06	0.07	96	6.0
9	M	242	0.06	0.08	97	6.0
10	M	241	0.06	0.08	96	5.9
11	M	241	0.06	0.08	97	5.8
12	M	242	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 60°C @ 5 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### 2. Accelerated Aging Condition: 60°C @ 15 days Conditioning: At least 16 hours

##### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	238	0.06	0.08	97	6.4
2	M	240	0.06	0.08	97	6.4
3	M	240	0.06	0.08	97	6.2
4	M	240	0.06	0.08	96	6.2
5	M	240	0.06	0.08	96	6.1
6	M	246	0.06	0.08	97	6.1

7	M	233	0.06	0.08	97	6.1
8	M	247	0.06	0.07	97	6.0
9	M	240	0.06	0.08	97	6.0
10	M	242	0.06	0.08	96	5.9
11	M	243	0.06	0.08	97	5.8
12	M	238	0.06	0.08	97	5.7
13	M	242	0.06	0.07	97	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 60°C@ 15 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### **3. Accelerated Aging Condition: 60°C @ 22 days      Conditioning: At least 16 hours**

#### A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 21°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.4
2	M	235	0.06	0.07	96	6.4
3	M	237	0.06	0.08	96	6.2
4	M	245	0.06	0.08	97	6.2
5	M	245	0.06	0.08	96	6.1
6	M	242	0.06	0.08	96	6.1
7	M	245	0.06	0.08	97	6.1
8	M	241	0.06	0.07	96	6.0
9	M	245	0.06	0.08	96	6.0
10	M	243	0.06	0.08	97	5.9
11	M	242	0.06	0.08	96	5.8
12	M	230	0.06	0.08	97	5.7
13	M	239	0.06	0.08	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the

specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 22 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**4. Accelerated Aging Condition: 60°C @ 35 days Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----**Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 21°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	97	6.4
2	M	243	0.06	0.07	96	6.4
3	M	245	0.06	0.08	96	6.4
4	M	248	0.06	0.08	97	6.3
5	M	245	0.06	0.08	96	6.2
6	M	243	0.06	0.07	96	6.1
7	M	245	0.06	0.08	97	6.1
8	M	246	0.06	0.07	96	6.0
9	M	241	0.06	0.08	96	6.0
10	M	242	0.06	0.08	97	5.9
11	M	243	0.06	0.08	96	5.8
12	M	242	0.06	0.08	97	5.7
13	M	241	0.06	0.07	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 35 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**5. Accelerated Aging Condition: 60°C @ 42 days Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----**Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	96	6.5
2	M	243	0.06	0.07	96	6.4
3	M	237	0.06	0.08	97	6.3
4	M	235	0.06	0.08	95	6.2
5	M	243	0.06	0.07	96	6.1
6	M	242	0.06	0.08	97	6.1
7	M	245	0.06	0.08	95	6.1
8	M	243	0.06	0.07	96	6.1
9	M	235	0.06	0.08	97	6.0
10	M	243	0.06	0.08	96	5.9
11	M	243	0.06	0.08	97	5.8
12	M	240	0.06	0.08	96	5.7
13	M	230	0.06	0.07	97	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break ≥6N).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 42 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101009071XA:**

Final performance-testing results of samples at conditions of 60°C@ 5 days, 60°C@15 days, 60°C@ 22 days, 60°C@ 35 days, 60°C@ 42 days conform to associate standard requirements, and can be used normally.

### III. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 60°C OF LOT NO. 20101017081SB

#### 1. Accelerated Aging Condition: 60°C @ 5 days      Conditioning: At least 16 hours

##### A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.5
2	M	240	0.06	0.07	97	6.4
3	M	237	0.06	0.08	96	6.3
4	M	240	0.06	0.07	97	6.3
5	M	240	0.06	0.08	97	6.2
6	M	233	0.06	0.08	97	6.2
7	M	240	0.06	0.08	96	6.2
8	M	241	0.06	0.07	97	6.0
9	M	240	0.06	0.08	97	6.0
10	M	242	0.06	0.08	97	5.9
11	M	240	0.06	0.08	96	5.8
12	M	236	0.06	0.08	97	5.8
13	M	240	0.06	0.07	97	5.7
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

#### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

#### C. TESTING RESULTS AT 60°C @ 5 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### 2. Accelerated Aging Condition: 60°C @ 15 days      Conditioning: At least 16 hours

##### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	97	6.3
2	M	240	0.06	0.07	97	6.3
3	M	236	0.06	0.08	97	6.2
4	M	240	0.06	0.08	97	6.2
5	M	240	0.06	0.08	96	6.1
6	M	235	0.06	0.08	97	6.1
7	M	240	0.06	0.08	97	6.1
8	M	244	0.06	0.07	97	6.0
9	M	242	0.06	0.08	97	6.0
10	M	241	0.06	0.07	97	5.9
11	M	241	0.06	0.08	97	5.8
12	M	238	0.06	0.08	96	5.7
13	M	240	0.06	0.07	97	5.7
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 15 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 60°C @ 22 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.5
2	M	237	0.06	0.07	97	6.4
3	M	240	0.06	0.08	97	6.3
4	M	240	0.06	0.08	97	6.3

5	M	239	0.06	0.08	96	6.3
6	M	241	0.06	0.08	96	6.2
7	M	240	0.06	0.08	96	6.2
8	M	242	0.06	0.07	96	6.0
9	M	240	0.06	0.08	97	6.0
10	M	237	0.06	0.08	96	5.9
11	M	241	0.06	0.08	96	5.8
12	M	240	0.06	0.08	97	5.7
13	M	241	0.06	0.08	96	5.6
Median Value						6.2

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 60°C @ 22 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### **4. Accelerated Aging Condition: 60°C @ 35 days      Conditioning: At least 16 hours**

##### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 21°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	96	6.4
2	M	241	0.06	0.07	97	6.3
3	M	242	0.06	0.08	97	6.2
4	M	241	0.06	0.07	98	6.2
5	M	240	0.06	0.08	97	6.2
6	M	235	0.06	0.08	97	6.2
7	M	243	0.06	0.08	97	6.1
8	M	242	0.06	0.08	97	6.1
9	M	241	0.06	0.08	96	6.0
10	M	243	0.06	0.08	97	5.9
11	M	239	0.06	0.08	96	5.8
12	M	242	0.06	0.08	96	5.8

13	M	240	0.06	0.07	97	5.8
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 60°C @ 35 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### **5. Accelerated Aging Condition: 60°C @ 42 days      Conditioning: At least 16 hours**

#### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 22°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	95	6.4
2	M	240	0.06	0.07	96	6.3
3	M	242	0.06	0.08	96	6.2
4	M	243	0.06	0.08	95	6.2
5	M	240	0.06	0.07	96	6.1
6	M	241	0.06	0.08	95	6.1
7	M	240	0.06	0.08	95	6.1
8	M	242	0.06	0.07	96	6.0
9	M	240	0.06	0.08	95	6.0
10	M	242	0.06	0.08	96	5.9
11	M	243	0.06	0.08	95	5.8
12	M	240	0.06	0.08	95	5.7
13	M	237	0.06	0.07	97	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 60°C @ 42 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101017081SB:**

Final performance-testing results of samples at conditions of 60°C@ 5 days, 60°C@ 15 days, 60°C@ 22 days, 60°C @ 35 days, 60°C @ 42 days conform to associate standard requirements, and can be used normally.

**IV. FINAL RESULT FOR ACCELERATED AGING PERFORMANCE TESTING RESULT AT 60°C:**

Through the accelerated aging performance test at 60°C@ 5 days, 60°C@ 15 days, 60°C @22 days, 60°C @ 35 days, 60°C @ 42 days on 3 lots products (Lot No: 20101005061XC, 20101009071XA, 20101017081SB) as per EN455-1, EN455-2, and EN 455-4, the final performance-testing results of samples conform to associate standard requirements, and can be used normally.

Prepared by:  Director of Factory

Date: December 08, 2020

Reviewed by:  QA Director of Hongray Group

Date: December 08, 2020

# SHIJIAZHUANG HONGRAY GROUP CO., LTD.

## PERFORMANCE TESTING REPORT @ 50°C FOR 5 TIME POINT

### Purpose:

As per EN455-4, carry out accelerated aging property test at 50°C for 5-time point (namely 22 days, 35 days, 55 days, 90 days, and 110 days) to verify and determine the shelf-life of Nitrile Examination Gloves, Purple-Blue

**Date Tested:** 2020.10.10-2021.02.01

### Samples Tested:

Size: M

**Product Name:** Nitrile Examination Gloves, Purple-Blue

**Product Lot No.:** 20101005061XC

20101009071XA

20101017081SB

### Standards:

EN 455-4: Medical Gloves for Single Use- Part 4 Requirements and Testing for Shelf life determination

EN 455-1: Medical Gloves for Single Use- Part 1 Requirements and testing for freedom from holes

EN 455-2: Medical Gloves for Single Use- Part 2 Requirements and testing for physical properties

**The detailed testing results of the samples above-mentioned are as follows:**

### **I. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 50°C OF LOT NO. 20101005061XC**

**I. Accelerated Aging Condition: 50°C@ 22 days      Conditioning: At least 16 hours**

A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	98	6.3
2	M	240	0.06	0.08	98	6.3
3	M	244	0.06	0.08	97	6.2
4	M	241	0.06	0.07	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	240	0.06	0.08	97	6.1
7	M	232	0.06	0.08	97	6.1
8	M	243	0.06	0.07	98	6.0
9	M	235	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9
11	M	231	0.06	0.08	97	5.8

12	M	242	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 50°C @ 22 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### **2. Accelerated Aging Condition: 50°C @ 35 days      Conditioning: At least 16 hours**

##### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.07	97	6.3
2	M	240	0.06	0.08	96	6.3
3	M	244	0.06	0.08	97	6.2
4	M	241	0.06	0.08	97	6.1
5	M	240	0.06	0.08	96	6.1
6	M	244	0.06	0.08	97	6.1
7	M	242	0.06	0.08	97	6.1
8	M	243	0.06	0.07	96	6.0
9	M	244	0.06	0.08	96	6.0
10	M	240	0.06	0.08	97	5.9
11	M	240	0.06	0.08	96	5.8
12	M	234	0.06	0.08	97	5.7
13	M	238	0.06	0.07	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	3

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 35 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 50°C @ 55 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.4
2	M	241	0.06	0.08	97	6.3
3	M	244	0.06	0.08	96	6.2
4	M	241	0.06	0.08	96	6.2
5	M	240	0.06	0.08	97	6.1
6	M	244	0.06	0.08	98	6.1
7	M	240	0.06	0.08	97	6.0
8	M	243	0.06	0.07	96	6.0
9	M	238	0.06	0.08	97	6.0
10	M	240	0.06	0.08	98	5.9
11	M	241	0.06	0.08	97	5.8
12	M	240	0.06	0.08	97	5.7
13	M	241	0.06	0.07	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break ≥6N).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	3

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 55 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**4. Accelerated Aging Condition: 50°C @ 90 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----**Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.3
2	M	240	0.06	0.08	98	6.3
3	M	244	0.06	0.08	97	6.2
4	M	241	0.06	0.07	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	244	0.06	0.08	97	6.1
7	M	236	0.06	0.08	97	6.0
8	M	243	0.06	0.07	96	6.0
9	M	235	0.06	0.08	97	6.0
10	M	240	0.06	0.08	96	5.9
11	M	237	0.06	0.08	97	5.7
12	M	241	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 90 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**5. Accelerated Aging Condition: 50°C @ 110 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----**Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 21°C, 52%

Serial No.	Size	Length	Thickness (mm)	Palm	Force at
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		(mm)	Test Piece	Middle Fingertip	Width (mm)	Break (N)
1	M	238	0.06	0.08	97	6.3
2	M	240	0.06	0.07	96	6.3
3	M	244	0.06	0.08	97	6.2
4	M	241	0.06	0.08	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	244	0.06	0.08	96	6.1
7	M	242	0.06	0.08	97	6.1
8	M	235	0.06	0.08	96	6.1
9	M	245	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9
11	M	241	0.06	0.08	96	5.8
12	M	239	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 110 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101005061XC:**

Final performance-testing results of samples at conditions of 50°C@ 22 days, 50°C@ 35 days, 50°C@ 55 days, 50°C@ 90 days, 50°C@ 110 days conform to associate standard requirements, and can be used normally.

**II. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 50°C OF LOT NO. 20101009071XA**

**1. Accelerated Aging Condition: 50°C @ 22 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 50%

Serial No.	Size	Length	Thickness (mm)	Palm	Force at
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		(mm)	Test Piece	Middle Fingertip	Width (mm)	Break (N)
1	M	242	0.06	0.08	97	6.3
2	M	240	0.06	0.08	98	6.3
3	M	238	0.06	0.08	97	6.2
4	M	241	0.06	0.08	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	246	0.06	0.08	97	6.1
7	M	239	0.06	0.08	97	6.0
8	M	243	0.06	0.07	96	6.0
9	M	245	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9
11	M	241	0.06	0.08	97	5.8
12	M	242	0.06	0.08	97	5.7
13	M	240	0.06	0.08	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 50°C @ 22 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### **2. Accelerated Aging Condition: 50°C @ 35 days      Conditioning: At least 16 hours**

##### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.08	97	6.4
2	M	240	0.06	0.08	98	6.3
3	M	237	0.06	0.08	97	6.2
4	M	241	0.06	0.07	97	6.2
5	M	240	0.06	0.08	96	6.1
6	M	244	0.06	0.08	97	6.1

7	M	239	0.06	0.08	97	6.1
8	M	243	0.06	0.07	96	6.0
9	M	245	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.8
11	M	241	0.06	0.08	97	5.8
12	M	239	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C@ 35 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 50°C @ 55 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia      Test Condition: 22°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.3
2	M	240	0.06	0.07	96	6.3
3	M	236	0.06	0.08	97	6.2
4	M	241	0.06	0.08	97	6.2
5	M	241	0.06	0.08	97	6.1
6	M	240	0.06	0.08	97	6.1
7	M	234	0.06	0.08	97	6.1
8	M	243	0.06	0.07	96	6.0
9	M	245	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9
11	M	241	0.06	0.08	97	5.9
12	M	238	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.6

Median Value	6.1
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It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 55 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**4. Accelerated Aging Condition: 50°C @ 90 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	244	0.06	0.07	97	6.3
2	M	237	0.06	0.08	97	6.2
3	M	241	0.06	0.08	97	6.2
4	M	241	0.06	0.08	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	241	0.06	0.08	98	6.1
7	M	242	0.06	0.08	97	6.0
8	M	243	0.06	0.07	96	6.0
9	M	241	0.06	0.08	97	6.0
10	M	236	0.06	0.08	97	5.9
11	M	240	0.06	0.08	97	5.8
12	M	242	0.06	0.08	97	5.7
13	M	235	0.06	0.07	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 90 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**5. Accelerated Aging Condition: 50°C @ 110 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING----**Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	97	6.4
2	M	240	0.06	0.08	96	6.3
3	M	241	0.06	0.08	97	6.2
4	M	241	0.06	0.07	97	6.2
5	M	242	0.06	0.08	97	6.1
6	M	238	0.06	0.08	97	6.1
7	M	242	0.06	0.08	97	6.1
8	M	243	0.06	0.07	96	6.1
9	M	245	0.06	0.08	97	6.0
10	M	235	0.06	0.08	96	5.9
11	M	241	0.06	0.08	97	5.8
12	M	239	0.06	0.08	97	5.7
13	M	241	0.06	0.07	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq$ 6N).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 110 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101009071XA:**

Final performance-testing results of samples at conditions of 50°C@ 22 days, 50°C@35 days, 50°C@ 55 days, 50°C@ 90 days, 50°C@ 110 days conform to associate standard requirements, and can be used normally.

### III. ACCELERATED AGING PERFORMANCE TESTING RESULT AT 50°C OF LOT NO. 20101017081SB

#### 1. Accelerated Aging Condition: 50°C @ 22 days      Conditioning: At least 16 hours

##### A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 53%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	238	0.06	0.08	97	6.3
2	M	240	0.06	0.08	96	6.3
3	M	244	0.06	0.08	97	6.2
4	M	237	0.06	0.08	97	6.2
5	M	240	0.06	0.07	97	6.1
6	M	239	0.06	0.08	96	6.1
7	M	242	0.06	0.08	97	6.0
8	M	236	0.06	0.07	96	6.0
9	M	235	0.06	0.08	96	6.0
10	M	241	0.06	0.08	97	5.9
11	M	241	0.06	0.08	97	5.7
12	M	239	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

#### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

#### C. TESTING RESULTS AT 50°C @ 22 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

#### 2. Accelerated Aging Condition: 50°C @ 35 days      Conditioning: At least 16 hours

##### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	240	0.06	0.08	97	6.3
2	M	240	0.06	0.07	98	6.3
3	M	244	0.06	0.08	97	6.2
4	M	237	0.06	0.08	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	241	0.06	0.08	98	6.1
7	M	242	0.06	0.08	97	6.1
8	M	243	0.06	0.07	98	6.0
9	M	236	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9
11	M	241	0.06	0.08	97	5.8
12	M	237	0.06	0.08	97	5.7
13	M	240	0.06	0.07	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

**B. Samples Pinhole Testing**

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia

200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	2

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 35 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**3. Accelerated Aging Condition: 50°C @ 55 days      Conditioning: At least 16 hours**

**A. ACCELERATED AGING PERFORMANCE TESTING ----Dimensions and Physical Properties**

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia

Test Condition: 22°C, 51%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	243	0.06	0.08	97	6.3

2	M	240	0.06	0.08	96	6.3
3	M	244	0.06	0.08	97	6.2
4	M	241	0.06	0.08	97	6.2
5	M	241	0.06	0.08	96	6.1
6	M	244	0.06	0.08	97	6.1
7	M	242	0.06	0.08	97	6.0
8	M	240	0.06	0.08	96	6.0
9	M	242	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9
11	M	241	0.06	0.08	96	5.8
12	M	242	0.06	0.08	97	5.7
13	M	241	0.06	0.07	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 50°C @ 55 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### 4. Accelerated Aging Condition: 50°C @ 90 days Conditioning: At least 16 hours

#### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 21°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	242	0.06	0.07	97	6.4
2	M	240	0.06	0.08	98	6.3
3	M	244	0.06	0.08	97	6.2
4	M	241	0.06	0.08	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	240	0.06	0.08	97	6.1
7	M	235	0.06	0.08	97	6.1
8	M	243	0.06	0.07	96	6.0
9	M	245	0.06	0.08	97	6.0

10	M	240	0.06	0.08	97	5.9
11	M	241	0.06	0.08	97	5.8
12	M	242	0.06	0.08	97	5.7
13	M	235	0.06	0.07	96	5.6
Median Value						6.1

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	4

It is showed from the above data that pinholes conform to requirements.

### C. TESTING RESULTS AT 50°C @ 90 days:

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

### 5. Accelerated Aging Condition: 50°C @ 110 days Conditioning: At least 16 hours

#### A. ACCELERATED AGING PERFORMANCE TESTING----Dimensions and Physical Properties

Test Method: EN 455-4 & EN 455-2

Sample Size and Specification: 13 pieces of gloves were sampled, and the median of the recorded result for force at break shall conform to the values of at least 6N.

Tested by: Du Suxia Test Condition: 22°C, 52%

Serial No.	Size	Length (mm)	Thickness (mm)		Palm Width (mm)	Force at Break (N)
			Test Piece	Middle Fingertip		
1	M	241	0.06	0.08	97	6.3
2	M	240	0.06	0.08	96	6.3
3	M	236	0.06	0.08	97	6.2
4	M	241	0.06	0.08	97	6.2
5	M	240	0.06	0.08	97	6.1
6	M	244	0.06	0.08	96	6.1
7	M	238	0.06	0.08	97	6.0
8	M	243	0.06	0.07	96	6.0
9	M	235	0.06	0.08	97	6.0
10	M	240	0.06	0.08	97	5.9
11	M	245	0.06	0.08	97	5.8
12	M	237	0.06	0.08	97	5.7
13	M	240	0.06	0.08	96	5.6
Median Value						6.0

It is showed from the above data that the performance testing of samples conform to the specification (Force at Break  $\geq 6N$ ).

### B. Samples Pinhole Testing

Testing Standard and Method: EN455-4 & EN 455-1

Sample Size: per ISO2859, inspection level G-1, AQL=1.5

Tested by: Du Suxia, Ren Junxia 200pcs (Ac=7, Re=8)

Item	Size	Sample Count (pcs)	Pinhole (pcs)
Free from holes	M	200	1

It is showed from the above data that pinholes conform to requirements.

**C. TESTING RESULTS AT 50°C @ 110 days:**

Final performance-testing results of samples conform to associate standard requirements, and can be used normally.

**6. FINAL RESULTS of LOT NO. 20101017081SB:**

Final performance-testing results of samples at conditions of 50°C@ 22 days, 50°C@ 35 days, 50°C@ 55 days, 50°C @ 90 days, 50°C @ 110 days conform to associate standard requirements, and can be used normally.

**IV. FINAL RESULT FOR ACCELERATED AGING PERFORMANCE TESTING RESULT AT 50°C:**

Through the accelerated aging performance test at 50°C@ 22 days, 50°C@ 35 days, 50°C @55 days, 50°C @ 90 days, 50°C @ 110 days on 3 lots products (Lot No: 20101005061XC, 20101009071XA, 20101017081SB) as per EN455-1, EN455-2, and EN 455-4, the final performance-testing results of samples conform to associate standard requirements, and can be used normally.

Prepared by:  Director of Factory

Date: February 01, 2021

Reviewed by:  Director of Hongray Group

Date: February 01, 2021