

# EU Type-examination Certificate

**Number:**  
**UE-000047/00**

## MID OCEAN BV

WELLENSIEKSTRAAT 2  
6718 XZ EDE - THE NETHERLANDS

Certificate issued by **Eurofins Textile Testing Spain, S.L. (Unipersonal)** as notified body n° 2865 in accordance with Annex V (Module B) of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment (PPE).

<b>PPE Type</b>	<b>GLOVE</b>
<b>Reference</b>	<b>MO9223</b>
<b>Variant(s)</b>	<b>---</b>
Description / Sizes Mitt or Glove with unique thumb separation. One size	

The protective equipment abovementioned complies with the essential health and safety requirements applicable, according to Annex II of Regulation (EU) 2016/425 as **Category II** PPE.

### Harmonised standard(s):

- EN 420:2003+A1:2009
- EN ISO 21420:2020
- EN 407:2020

### Performance level(s) obtained:

- For thermal domestics risks:  
**CONTACT HEAT LEVEL 2**

### Other technical specifications:

For Category III PPE, this EU type-examination certificate must be used in conjunction with one of the conformity assessment procedures base on internal production control plus supervised product checks at random intervals (Module C2) or based on the quality assurance of the production process (Module D), according to Regulation (EU) 2016/425.



Date of Issue: 06/08/2021  
Expiry date: 06/08/2026  
Renovation date: \_\_/\_\_/\_\_

Marta Nieto Araujo  
Certification director

## TECHNICAL REPORT FOR EU TYPE-EXAM CERTIFICATION of Personal Protective Equipment (PPE)

EU TYPE EXAMINATION Nº:

UE-000047/00

APPLICATION DATE:

12/07/2021

DATE OF ISSUE:

06/08/2021

APPLICANT:

MID OCEAN BV  
WELLENSIEKSTRAAT 2  
6718 XZ EDE - THE NETHERLANDS

PPE TYPE:

GLOVE

REFERENCE (PPE):

MO9223

INDEX:

1. PPE identification
2. Certification scope
3. Documentation submitted
4. Relationship between this European Standard and Annex II of Regulation (EU) 2016/425 on PPE
5. Design evaluation
6. Dexterity
7. Summary of results
8. Conclusion

ANNEX.- EU Type-Examination Certificate

# 1. PPE IDENTIFICATION

## 1.1 Description and photography

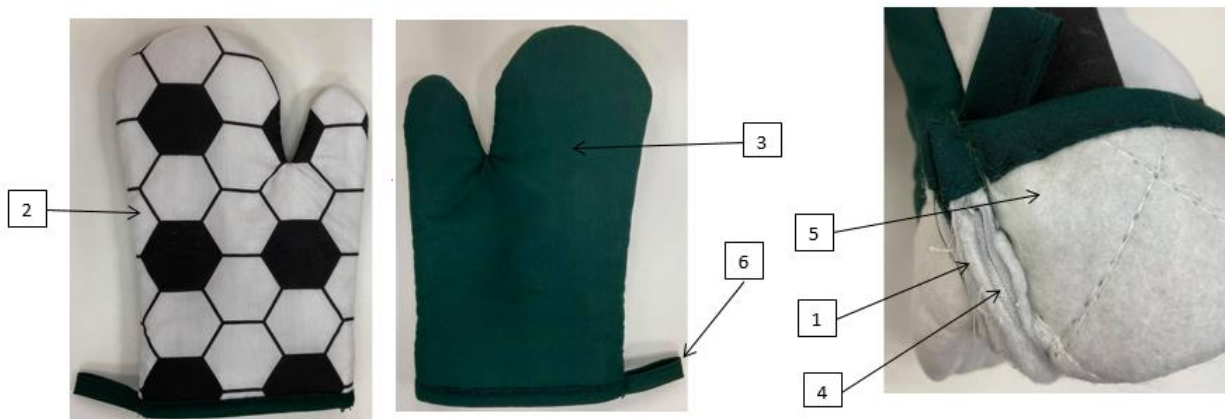


## 1.2 Description of the components

PPE components according to the information supplied by the manufacturer:

Part	Component description	Position	Material	CAS number	EC number	Weight Percentage	Food contact?
1	Filling	Glove	Polyester	-	932-015-1	58,00%	NO
2	Soccer pattern fabric on glove	Glove	Polyester	-	932-015-2	14,00%	NO
3	Green fabric on glove	Glove	Polyester	-	932-015-3	14,00%	NO
4	Silvery fabric inside the glove	Glove	Polyester	-	932-015-4	10,00%	NO
5	White inside of glove	Glove	Polypropylene	9003-07-0	618-352-4	2,00%	NO
6	Hoop of glove	Glove	Polyester	-	932-015-4	2,00%	NO
Sum						100,00%	

Image



Weight: 63 g

### 1.3 Sizes

The size chart supplied by the manufacturer:

Size	Length of the user's hand (mm)	Perimeter of the user's hand (mm)
One size	≤ 240	≤ 198

### 1.4 Samples given for certification

On the 12<sup>th</sup> of July, 20 gloves arrive in the laboratory.

## 2. CERTIFICATION SCOPE

- **EN 420:2003+A1:2009** - Protective gloves - General requirements and test methods.
- **EN ISO 21420:2020** - Protective gloves - General requirements and test methods.
- **EN 407:2020** - Protective gloves and other hand protective equipment against thermal risks (heat and/or fire).

For the protection of the hands of the user against the following risks:

- For thermal domestic risks: Contact heat

## 3. DOCUMENTATION SUBMITTED

- Technical documentation, including the next points:
  - Complete description of the PPE and of its intended use
  - Assessment of the risks against which the PPE is intended to protect
  - List of the essential health and safety requirements that are applicable
  - Design and manufacturing drawings and schemes of the PPE and of its components and explanations
  - Reference of the harmonised standards and/ or other technical specifications
  - Reports on the tests carried out to verify the conformity of the PPE
  - A description of the means used by the manufacturer during the production (Módulo C)
    - Manufacturer's instructions
    - Marking
    - Declaration of conformity

#### 4. RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND ANNEX II OF REGULATION (EU) 2016/425 ON PPE

- **EN 420:2003+A1:2009** - Protective gloves - General requirements and test methods.

Essential Health and Safety Requirements, according to Annex II of Regulation (EU) 2016/425	Clause(s) / sub-clause(s) of the standard EN 420:2003+A1:2009	Result
1.2.1.1 Suitable constituent materials	4.3	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.2.1.3 Maximum permissible user impediment	5.2	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.3.1 Adaptation of PPE to user morphology	5.1	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.4 Manufacturer's instructions and information	7.3	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.2 PPE enclosing the parts of the body to be protected	5.3	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.4 PPE subject to ageing	4.4 and 7.2.3	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.12 PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety	7.2 and Annex B	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>

- **EN ISO 21420:2020** - Protective gloves - General requirements and test methods.

Essential Health and Safety Requirements, according to Annex II of Regulation (EU) 2016/425	Clause(s) / sub-clause(s) of the standard EN ISO 21420:2020	Result
1.2.1.1 Suitable constituent materials	4.2	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.2.1.3 Maximum permissible user impediment	5.2	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.4 Manufacturer's instructions and information	7.3	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.4 PPE subject to ageing	4.3; 7.2.1.1 f) and 7.2.2 g)	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.5 PPE which may be caught up during use	7.3.7	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>

2.6 PPE for use in potentially explosive atmospheres	4.4	Meet <input type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input checked="" type="checkbox"/>
2.12 PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety	7.2.1.1 d); 7.2.2 e) and 7.3.5	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>

• **EN 407:2020 - Protective gloves and other hand protective equipment against thermal risks (heat and/or fire).**

Essential Health and Safety Requirements, according to Annex II of Regulation (EU) 2016/425	Clause(s) / sub-clause(s) of the standard EN 407:2020	Result
1.2.1 Absence of inherent risks and other nuisance factors	4.4.1	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.3.2 Lightness and strength	4.3	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.4 Manufacturer's instructions and information	8	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.7 PPE intended for rapid intervention or to be put on or removed rapidly	4.4.1 and 8	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.12 PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety	7	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
3.6 Protection against heat and/or fire	4.5	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>

## 5. DESIGN EVALUATION

• **EN 420:2003+A1:2009 - Protective gloves - General requirements and test methods.**

Glove size: U

SAMPLE	MEASUREMENTS (glove)	DIMENSIONS (mm)
1	Contour of the glove (mm)	200
	Total length (mm)	240
2	Contour of the glove (mm)	200
	Total length (mm)	240
3	Contour of the glove (mm)	198
	Total length (mm)	241

Table of sizes, according to Technical File presented:

Size	Length of the user's hand (mm)	Perimeter of the user's hand (mm)
One size	≤ 240	≤ 198

After checking the dimensions of the protective glove size **U** and the measurements, by size to be marketed, provided by the customer in its Technical Documentation, it is declared:

Acceptable

Not acceptable

## 6. DEXTERITY

- **EN 420:2003+A1:2009 and EN ISO 21420:2020**- Protective gloves - General requirements and test methods.

### Test report:

GLOVE SIZE	Smallest diameter of pin fulfilling test conditions (mm)
U	---
U	---
U	---
U	---

### Requirement:

Level of performance	Diameter of pin (mm)
1	11,0
2	9,5
3	8,0
4	6,5
5	5,0

After checking the evaluation of the dexterity, according to the method described in point 6.2 of the standard, it declares:

Level of performance 0

Level of performance 1

Level of performance 2

Level of performance 3

Level of performance 4

Level of performance 5

## 7. SUMMARY OF RESULTS

LEGEND RESULTS	
M	Meet
NM	Not meet
NA	Not Applicable
NT	Not Tested

- **EN 420:2003+A1:2009** - Protective gloves - General requirements and test methods.

TEST	BE APLICATED	STANDARD	REQUERIMENTS	*UoM.	REPORT Nº	RESULT
<b>General</b> point 4.3.1	Glove	-	EN 420:2003+A1:2003, point 4.3.1	NA	NA	M
<b>Determination of pH value</b> point 4.3.2	White fabric	Others EN ISO 3071 Leather EN ISO 4045	EN 420:2003+A1:2009, point 4.3.2 The glove material shall have a pH value between 3,5 and 9,5.	± 0,3	AR-21-YL-007858-01	M
	Black fabric					M
	Green fabric					M
	Padding					M
	Silver inner layer					M
<b>Cr (VI) Level</b> point 4.3.3	Each layer of material (leather)	EN ISO 17075:2007	EN 420:2003+A1:2009, point 4.3.3 Must stay < 3mg/kg	NA	NA	NA
<b>Determination of the free protein content,</b> point 4.3.4	Rubber	EN 455-3	EN 420:2003+A1:2009, point 4.3.4 EN 455-3 If the glove contains any substances known to cause allergic reactions, it shall be stated in the product information	NA	NA	NA
<b>Cleaning</b> point 4.4	Glove After pre treatment 25 whases	-	EN 420:2003+A1:2009, point 4.4	NA	NA	---
<b>Sizing</b> point 5.1	Glove	EN 420:2003+A1:2009, point 5.1	EN 420:2003+A1:2009, point 5.1 The glove sizes are standardized according to minimum length.	± 0,1 mm	Point 5 of this report	M
<b>Dexterity</b> point 5.2	Glove	EN 420:2003+A1:2009, point 5.2	EN 420:2003+A1:2009 Table 4	NA	Point 6 of this report	Level 0
<b>Determination of the transmission of water vapor</b> point 5.3.1	textile / exterior assembly	EN 420:2003+A1:2009, point 6.3 (IUP 15)	EN 420:2003+A1:2009, point 5.3.1 5mg/(cm <sup>2</sup> -h)	NT	NT	NT
<b>Determination of water vapour absorption</b> point 5.3.2	textile / exterior assembly	EN 420:2003+A1:2009, point 6.3 (IUP 15)	EN 420:2003+A1:2009, point 5.3.2 8mg/cm <sup>2</sup> -8h)	NT	NT	NT
<b>Marking</b> point 7.2	EN 420:2003+A1:2009, point 7.2			NA	NA	M
<b>Information supplied by the manufacturer</b> point 7.3	EN 420:2003+A1:2009, point 7.3			NA	NA	M



- EN ISO 21420:2020 - Protective gloves - General requirements and test methods.

TEST	BE APLICATED	STANDARD	REQUERIMENTS	*UoM.	REPORT Nº	RESULT
Determination of content in Chromium (VI) point 4.2	Each layer of material (Leather)	ISO 17075-1 o ISO 17075-2	EN ISO 21420:2020, point 4.2 ≤ 3mg/kg	NA	NA	NA
Release of nickel point 4.2	All metallic materials in contact with the skin	EN 1811+A1:2015	EN ISO 21420:2020, point 4.2 < 0,5µg/cm <sup>2</sup> per week	NA	NA	NA
Determination of pH point 4.2	White fabric	Leather ISO 4045 Others ISO 3071	EN ISO 21420:2020, point 4.2 Between 3,5 and 9,5	± 0,3	AR-21-YL-007858-01	M
	Black fabric					M
	Green fabric					M
	Padding					M
	Silver inner layer					M
Determination of azo colorants which release carcinogenic amines point 4.2	Black fabric+Green fabric+Silver inner layer	Textile EN 14362-1 Leather ISO 17234-1	EN ISO 21420:2020, point 4.2 Shall be not detectable	NA	AR-21-YL-007858-01	M
Dimethylformamide (DMFa) point 4.2	PU	EN 16778	EN ISO 21420:2020, point 4.2 ≤ 1000 mg/kg (0,1% weight/weight)	NA	NA	NA
Determination of Polycyclic aromatic hydrocarbons (PAHs) point 4.2	Rubber or plastic materials in contact with the skin	ISO / TS 16190	EN ISO 21420:2020, point 4.2 and table 1 ≤ 1 mg/kg (0,0001% by mass+ of this component)	NA	NA	NA
Cleaning point 4.3	Glove After pre treatment 25 washes	-	EN ISO 21420:2020, point 4.3 and 7.3.14	NA	AR-21-YL-008183-01	---
Electrostatic properties point 4.4.1	Exterior fabric / assembly	EN 16350	EN ISO 21420:2020, point 4.4.1 Additional electrostatic properties determined by the test standards EN 1149-1 or EN 1149-3	NT	NT	NT
Dexterity point 5.2	Glove	EN ISO 21420:2020, point 6.2	EN ISO 21420:2020, point 5.2 and table 2	NA	Point 6 of the report	Level 0
Marking point 7.2	EN ISO 21420:2020, point 7.2 and Annex C			NA	NA	M
Information supplied by the manufacturer point 7.3	EN ISO 21420:2020, point 7.3			NA	NA	M

- **EN 407:2020** - Protective gloves and other hand protective equipment against thermal risks (heat and/or fire).

TEST	BE APPLICATED	STANDARD	REQUERIMENTS	*UoM.	REPORT N <sup>o</sup>	RESULT		
<b>Tear resistance</b> point 4.3	Glove Before washing	EN 407:2020, point 6.8	EN 407:2020, point 4.3 ≥ 10 N	NA	AR-21-YL- 008183-01	M		
	Glove Afetr washing					M		
<b>Sizes</b> point 4.4	Glove	EN ISO 21420:2020	EN 407:2020, point 4.4	NA	NA	NA		
<b>General Thermal performance</b> point 4.5.1	Glove	EN 407:2020, point 4.5	EN 407:2020, point 4.5.1 , Annex A	NA	NA	M		
<b>Limited flame spread</b> point 4.5.2	Glove	EN 407:2020, point 6.2 ISO 15025:2016, method A	EN 407:2020, point 4.5.2, table 2			NT	NT	NT
			Level	After flame	After glow time s			
			1	≤ 15	---			
			2	≤ 10	≤ 120			
			3	≤ 3	≤ 25			
4	≤ 2	≤ 5						
<b>Limited flame spread</b> point 4.5.2	Glove	EN 407:2020, point 6.2 ISO 15025:2016, method B	EN 407:2020, point 4.5.2, table 2			NT	NT	NT
			Level	After flame	After glow time s			
			1	≤ 15	---			
			2	≤ 10	≤ 120			
			3	≤ 3	≤ 25			
4	≤ 2	≤ 5						
<b>Limited flame spread</b> point 4.5.2	Seams and acesories	EN 407:2020, point 6.2 ISO 15025:2016, method A	EN 407:2020, point 4.5.2, table 2			NT	NT	NT
			Level	After flame	After glow time s			
			1	≤ 15	---			
			2	≤ 10	≤ 120			
			3	≤ 3	≤ 25			
4	≤ 2	≤ 5						
<b>Contact heat</b> point 4.5.3	Glove Before washing	EN 407:2020, point 6.3 ISO 12127-1:2015	EN 407:2020, point 4.5.3, table 3			11%	AR-21-YL- 008183-01	Level 2
	Glove Afetr washing		Level	Tc°C	t <sub>t</sub> s			
			1	100	≥ 15			
			2	250	≥ 15			
			3	350	≥ 15			
4	500	≥ 15						
Level 2								
<b>Convective heat</b> point 4.5.4	Glove	ISO 9151:2016	EN 407:2020, point 4.5.4, table 4			NT	NT	NT
			Level	HTI s				
			1	≥ 4				
			2	≥ 7				
			3	≥ 10				
4	≥ 18							
<b>Radiant heat</b> point 4.5.5	Glove	ISO 6942:2002, method B	EN 407:2020, point 4.5.5, table 5			NT	NT	NT
			Level	HT t <sub>24</sub> s				
			1	≥ 7				
			2	≥ 20				
			3	≥ 50				
4	≥ 95							
<b>Small splashes of molten metal</b> point 4.5.6	Glove	ISO 9150:1988	EN 407:2020, point 4.5.6, table 6			NT	NT	NT
			Level	N <sup>o</sup> of droplets				
			1	≥ 10				
			2	≥ 15				
			3	≥ 25				
4	≥ 35							

Large quantities of molten metal point 4.5.7	Glove	ISO 9185:2007	EN 407:2020, point 4.5.7, tabla 7		NT	NT	NT
			Level	Molten iron g.			
			1	≥ 10			
			2	≥ 15			
			3	≥ 25			
4	≥ 35						
Marking point 7	Glove	EN 407:2020, point 7			NA	NA	M
Information supplied by the manufacturer point 8	Glove	EN 407:2020, point 8			NA	NA	M

## 8. CONCLUSION

Based on the results obtained in the exams, evaluations and revisions the following can be deduced:

The PPE type **GLOVE** reference **MO9223**, classified as Category **II** Individual Protective Equipment and whose characteristics are stated in point 1 of this report, **COMPLIES** with the essential requirements established by Regulation (EU) 2016/425 of 9 March 2016 through the application of the standards and risks as stated in point 2 of this report.

Elche, 6<sup>th</sup> of August 2020

Signature of the conformity evaluator:

Analytical Report Nr.

AR-21-YL-007858-01

Sample code Nr.

560-2021-00008154

Date

27/07/2021

**ANALYTICAL REPORT****Client Information**

Mid Ocean Brands BV  
Wellensiekstraat 2  
Ede GLD the NETHERLANDS  
+31 0 342 426 992  
koblukb@midocean.com

For the attention of Ms. Bernadetta Kobluk

**Sample Information**

**Order Code:** EUAA70-00012952  
**Reception Date:** 12-Jul-2021  
**Analysis Starting Date:** 12-Jul-2021  
**Analysis Ending Date:** 23-Jul-2021  
**Sample code Nr.** 560-2021-00008154  
**Sample described as:** Glove

**Requirements and decision rule**

**Customer requirements:** ISO 21420:2020; EN 420:2003+A1:2009  
**Decision Rule:** Binary Statement with Guard Band. Probability of False Acceptance <2,5%

**Information provided by the customer(2)**

**Client Reference:** MO9223  
**Sample Description:**  
**Purchase Order Number:**

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Sample code Nr.

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Date

27/07/2021

**SAMPLE PICTURE**

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Sample code Nr.

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Date

27/07/2021

**CONCLUSION:**

TEST PROPERTY	PASS	FAIL	REMARKS
<b>Determination of azo dyes</b> EN ISO 14362-1:2017			
F - Black fabric+Green fabric+Silver inner layer	X		
<b>Determination of pH of aqueous extract</b> ISO 3071:2020			
A - White fabric	X		
B - Black fabric	X		
C - Green fabric	X		
D - Padding	X		
E - Silver inner layer	X		

**Remark:** Test has been performed as per application request

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AR-21-YL-007858-01

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560-2021-00008154

Date

27/07/2021

**COMPONENT LIST:**

COMPONENT ID	COMPONENT NAME	MATERIAL DESCRIPTION	COLOR	REMARKS
CUST 01	A - White fabric	Fabric	White	---
CUST 02	B - Black fabric	Fabric	Black	---
CUST 03	C - Green fabric	Fabric	Green	---
CUST 04	D - Padding	Padding	White	---
CUST 05	E - Silver inner layer	Fabric	Silver	---
CUST 06	F - Black fabric+Green fabric+Silver inner layer	Mix	Mix	---

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AR-21-YL-007858-01

Sample code Nr.

560-2021-00008154

Date

27/07/2021

CHEMICAL TESTS	CAS No.	RESULTS	UNC.	LOQ	GUIDELINES
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### Analyses on:A - White fabric

#### Determination of pH of aqueous extract

Analysis Ending Date: 23/07/2021

##### ISO 3071:2020

Extractor solution pH value		6.3		-	
Extractor solution temperature		21.4 °C		-	
pH value (average)		6.8	(± 0.3)	-	Between 3.5 and 9.5 ✓ PASS

Extractor solution: KCl

### Analyses on:B - Black fabric

#### Determination of pH of aqueous extract

Analysis Ending Date: 23/07/2021

##### ISO 3071:2020

Extractor solution pH value		6.3		-	
Extractor solution temperature		21.4 °C		-	
pH value (average)		7.3	(± 0.3)	-	Between 3.5 and 9.5 ✓ PASS

Extractor solution: KCl

### Analyses on:C - Green fabric

#### Determination of pH of aqueous extract

Analysis Ending Date: 23/07/2021

##### ISO 3071:2020

Extractor solution pH value		6.1		-	
Extractor solution temperature		21.3 °C		-	
pH value (average)		6.6	(± 0.3)	-	Between 3.5 and 9.5 ✓ PASS

Extractor solution: KCl



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27/07/2021

CHEMICAL TESTS	CAS No.	RESULTS	UNC.	LOQ	GUIDELINES
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### Analyses on:D - Padding

#### Determination of pH of aqueous extract

Analysis Ending Date: 23/07/2021

##### ISO 3071:2020

Extractor solution pH value		6.1		-	
Extractor solution temperature		21.3 °C		-	
pH value (average)		7.2	(± 0.3)	-	Between 3.5 and 9.5 ✓ PASS

Extractor solution: KCl

### Analyses on:E - Silver inner layer

#### Determination of pH of aqueous extract

Analysis Ending Date: 23/07/2021

##### ISO 3071:2020

Extractor solution pH value		6.1		-	
Extractor solution temperature		21.3 °C		-	
pH value (average)		4.8	(± 0.3)	-	Between 3.5 and 9.5 ✓ PASS

Extractor solution: KCl

### Analyses on:F - Black fabric+Green fabric+Silver inner layer

#### Determination of azo dyes

Analysis Ending Date: 23/07/2021

##### EN ISO 14362-1:2017

4-Aminobiphenyl	92-67-1	<5 mg/kg		5	<20 mg/kg ✓ PASS
Benzidin	92-87-5	<5 mg/kg		5	<20 mg/kg ✓ PASS
4-Chlorotoluidine	95-69-2	<5 mg/kg		5	<20 mg/kg ✓ PASS
2-Naphthylamine	91-59-8	<5 mg/kg		5	<20 mg/kg ✓ PASS
p-Chloroaniline	106-47-8	<5 mg/kg		5	<20 mg/kg ✓ PASS
2,4-Diaminoanisole	615-05-4	<5 mg/kg		5	<20 mg/kg ✓ PASS
4,4-Diaminodiphenylmethan	101-77-9	<5 mg/kg		5	<20 mg/kg ✓ PASS
3,3-Dichlorobenzidine	91-94-1	<5 mg/kg		5	<20 mg/kg ✓ PASS
3,3-Dimethoxybenzidine	119-90-4	<5 mg/kg		5	<20 mg/kg ✓ PASS
3,3-Dimethylbenzidine	119-93-7	<5 mg/kg		5	<20 mg/kg ✓ PASS
3,3-Dimethyl-4,4-diaminodiphenyl methane	838-88-0	<5 mg/kg		5	<20 mg/kg ✓ PASS
p-Cresidine	120-71-8	<5 mg/kg		5	<20 mg/kg ✓ PASS

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Analytical Report Nr.

AR-21-YL-007858-01

Sample code Nr.

560-2021-00008154

Date

27/07/2021

CHEMICAL TESTS	CAS No.	RESULTS	UNC.	LOQ	GUIDELINES
<b>Determination of azo dyes</b>					Analysis Ending Date: 23/07/2021
<b>EN ISO 14362-1:2017</b>					
4,4-Methylene-bis-2-chloroaniline	101-14-4	<5 mg/kg		5	<20 mg/kg ✓ PASS
4-Aminophenileter	101-80-4	<5 mg/kg		5	<20 mg/kg ✓ PASS
4,4-Thiodianilin	139-65-1	<5 mg/kg		5	<20 mg/kg ✓ PASS
o-Toluidin	95-53-4	<5 mg/kg		5	<20 mg/kg ✓ PASS
2,4-Diaminotoluene	95-80-7	<5 mg/kg		5	<20 mg/kg ✓ PASS
2,4,5-Trimethylaniline	137-17-7	<5 mg/kg		5	<20 mg/kg ✓ PASS
o-Anisidine	90-04-0	<5 mg/kg		5	<20 mg/kg ✓ PASS
2,4-Xylidine	95-68-1	<5 mg/kg		5	<20 mg/kg ✓ PASS
2,6-Xylidine	87-62-7	<5 mg/kg		5	<20 mg/kg ✓ PASS
Aniline *	62-53-3	<5 mg/kg		5	<20 mg/kg ✓ PASS
1-4-phenylenediamine *	106-50-3	<5 mg/kg		5	<20 mg/kg ✓ PASS
4-Chloro-o-toluidinium chloride *	3165-93-3	<5 mg/kg		5	<20 mg/kg ✓ PASS
2-Naphthylammoniumacetate *	553-00-4	<5 mg/kg		5	<20 mg/kg ✓ PASS
4-Methoxy-m-phenylene Diammonium Sulphate *	39156-41-7	<5 mg/kg		5	<20 mg/kg ✓ PASS
2,4,5-Trimethylaniline hydrochloride *	21436-97-5	<5 mg/kg		5	<20 mg/kg ✓ PASS

Detection and quantification method: GC/MS

Sampling procedure: Section 9 EN ISO 14362-1:2017

Evaluation Procedure - Point 10.1 (EN ISO 14362-1:2017)

\*Parameters not covered by the accreditation scope

o-aminoazotoluene and 5-nitro-o-toluidine are further reduced to o-toluidine and 2,4-diaminotoluene.

Azo colorants that are able to form 4-aminoazobenzene, generate under the condition of this method aniline (CAS number 62-53-3) and 1,4 phenylenediamine (CAS-number 106-50-3). Due to detection limits, only aniline may be detected. The presence of these colorants should be tested by EN 14362-3.

**Analytical Report Nr.**

AR-21-YL-007858-01

**Sample code Nr.**

560-2021-00008154

**Date**

27/07/2021

**Signed for and on behalf of Eurofins Textile Testing Spain:**

Report electronically validated by

**Mariola Serra**

Textil technical innovator

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## EXPLANATORY NOTE

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- ◆ Test not covered by ENAC accreditation scope
  - Test is subcontracted within Eurofins group and is accredited
  - Test is subcontracted within Eurofins group and is not accredited
  - Test is subcontracted outside Eurofins group and is accredited
  - Test is subcontracted outside Eurofins group and is not accredited
- N/A = Not Applicable

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Test uncertainties not reported are at customer disposal, for those tests in which it is possible to evaluate the test uncertainty.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , which for a normal distribution provides a level of confidence of approximately 95%.

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### End Of Report

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**Eurofins Textile Testing Spain, S.L.U.**

Calle Germán Bernácer, 4

03203 Elche

SPAIN

**Phone**+34 966 299 638**www.eurofins.com/tex**

ENAC is signatory of EA and ILAC Multilateral Agreement for testing

Activities not covered by ENAC accreditation are marked with ◆ ○ ● □ ■ \*

Analytical Report Nr.

AR-21-YL-008183-01

Sample code Nr.

560-2021-00008155

Date

30/07/2021

**ANALYTICAL REPORT****Client Information**

---

Mid Ocean Brands BV  
Wellensiekstraat 2  
Ede GLD the NETHERLANDS  
+31 0 342 426 992  
koblukb@midocean.com  
For the attention of Ms. Bernadetta Kobluk

**Sample Information**

---

**Order Code:** EUAA70-00012952  
**Reception Date:** 12-Jul-2021  
**Analysis Starting Date:** 12-Jul-2021  
**Analysis Ending Date:** 29-Jul-2021  
**Sample code Nr.** 560-2021-00008155  
**Sample described as:** Glove

**Requirements and decision rule**

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**Customer requirements:** EN 407:2020  
**Decision Rule:** Binary Statement with Guard Band. Probability of False Acceptance <2,5%

**Information provided by the customer(2)**

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**Client Reference:** MO9223  
**Sample Description:**  
**Purchase Order Number:**

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Analytical Report Nr.

AR-21-YL-008183-01

Sample code Nr.

560-2021-00008155

Date

30/07/2021

## SAMPLE PICTURE



Analytical Report Nr.

AR-21-YL-008183-01

Sample code Nr.

560-2021-00008155

Date

30/07/2021

**CONCLUSION:**

TEST PROPERTY	PASS	FAIL	REMARKS
<b>■ Tear resistance</b> EN 388:2016+A1:2018			
A - Glove as received	X		
C - Glove after 25 washing cycles	X		
<b>■ Determination of contact heat transmission</b> EN ISO 12127-1:2015			
A - Glove as received	X		LEVEL 2
C - Glove after 25 washing cycles	X		LEVEL 2
<b>■ Domestic washing and drying procedures for textile testing</b> ISO 6330:2012			
B - Washing cycles			REFER RESULT

**Remark:** Test has been performed as per application request

Analytical Report Nr.

AR-21-YL-008183-01

Sample code Nr.

560-2021-00008155

Date

30/07/2021

**COMPONENT LIST:**

COMPONENT ID	COMPONENT NAME	MATERIAL DESCRIPTION	COLOR	REMARKS
CUST 01	A - Glove as received	Glove	Several colours	---
CUST 02	B - Washing cycles	Glove	Several colours	---
CUST 03	C - Glove after 25 washing cycles	Glove	Several colours	---

Analytical Report Nr.

AR-21-YL-008183-01

Sample code Nr.

560-2021-00008155

Date

30/07/2021

NOTIFIED BODY	CAS No.	RESULTS	UNC.	LOQ	GUIDELINES
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### Analyses on:A - Glove as received

<ul style="list-style-type: none"> <li>▪ <b>Tear resistance</b> EN 388:2016+A1:2018</li> </ul>		Results	See annex	-	Analysis Ending Date: 29/07/2021
<ul style="list-style-type: none"> <li>▪ <b>Determination of contact heat transmission</b> EN ISO 12127-1:2015</li> </ul>		Results	See annex	-	Analysis Ending Date: 29/07/2021

### Analyses on:B - Washing cycles

<ul style="list-style-type: none"> <li>▪ <b>Domestic washing and drying procedures for textile testing</b> ISO 6330:2012</li> </ul>		Results	See annex	-	Analysis Ending Date: 29/07/2021
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### Analyses on:C - Glove after 25 washing cycles

<ul style="list-style-type: none"> <li>▪ <b>Tear resistance</b> EN 388:2016+A1:2018</li> </ul>		Results	See annex	-	Analysis Ending Date: 29/07/2021
<ul style="list-style-type: none"> <li>▪ <b>Determination of contact heat transmission</b> EN ISO 12127-1:2015</li> </ul>		Results	See annex	-	Analysis Ending Date: 29/07/2021



**Analytical Report Nr.**

AR-21-YL-008183-01

**Sample code Nr.**

560-2021-00008155

**Date**

30/07/2021

**Signed for and on behalf of Eurofins Textile Testing Spain:**  
  
Eurofins Textile Testing Spain, S.L.U.  
C/ L'Alfama, 4, Elche (Alicante)  
03203

Report electronically validated by

**Sara Olcina**

Physical laboratory technician

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## EXPLANATORY NOTE

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  - Test is subcontracted within Eurofins group and is accredited
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### End Of Report

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**Eurofins Textile Testing Spain, S.L.U.**

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SPAIN

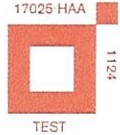
**Phone**+34 966 299 638**www.eurofins.com/tex**



**PJ LABORATORIJ**  
**LABORATORY DEPARTMENT**

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MIRTA-KONTROL d.o.o. Laboratory department is accredited testing laboratory according to the standard HRN EN ISO/IEC 17025:2017 by the Croatian Accreditation Agency in the scope described in annex to Accreditation Certificate number 1124.



## TEST REPORT

### No. 1421-1/21

**The customer:** EUROFINS TEXTILE TESTING SPAIN SL **Client code:** 636  
C/ GERMAN BERNACER 4  
03203 ELCHE,  
SPAIN

**Sample type:** Oven gloves

**Data provided by a customer:** Oven gloves  
Sample No.: 560-2021-00008155  
Order No. EUAA70-00012952

**Sampling:** On delivered samples

**Sample description:** Palm - black and white woven fabric  
Back - green woven fabric  
Lining on the whole gloves – white non-woven fabric  
New sample, (16 gloves)

**Conditioning:** Test samples conditioned at (23±2) °C and (50±5) % RH for 24 h.

**Pre-treatment:** 25 cycles of washing at 30°C, HRN EN ISO 6330:2012,  
washing 3N, drying (A) air dry

**Work order:** 537-1/21

**Laboratory mark of sample:** 1283-1/21

**Date of receipt:** 15.07.2021 **Date of test end:** 27.07.2021

**TEST RESULTS**

<b>TEST PARAMETER</b> <i>Test method</i>	<i>Requirements acc. to <sup>1)</sup></i> <b>HRN EN 407:2020</b>	<b>RESULT</b>	
<b>Contact heat resistance, (s)</b> <b>- before pretreatment</b> HRN EN 407:2020, c.6.3 HRN EN ISO 12127-1:2016	level 1 $\geq 15$ at 100 °C level 2 $\geq 15$ at 250 °C level 3 $\geq 15$ at 350 °C level 4 $\geq 15$ at 500 °C  no sign of melting and holing	Palm - black and withe fabric  at 100 °C: at 250 °C: at 350 °C:  observations:	lowest value:  91,8 / 97,2 / 93,5 <b>92</b> 26,7 / 27,1 / 28,3 <b>27</b> 11,7 / 10,9 / 11,2 <b>11</b> no hole, no hardening, no shrinking, no swelling
<b>Contact heat resistance, (s)</b> <b>- after pretreatment</b> HRN EN 407:2020, c.6.3 HRN EN ISO 12127-1:2016	level 1 $\geq 15$ at 100 °C level 2 $\geq 15$ at 250 °C level 3 $\geq 15$ at 350 °C level 4 $\geq 15$ at 500 °C  no sign of melting and holing	Back - green fabric  at 100 °C: at 250 °C: at 350 °C:  observations:	lowest value:  112,0 / 112,5 / 113,7 <b>112</b> 28,7 / 29,1 / 28,5 <b>29</b> 10,6 / 10,6 / 10,7 <b>11</b> no hole, no hardening, no shrinking, no swelling
		The performance level: <b>level 2 <sup>2)</sup></b>	
<i>Expanded measurement uncertainty <math>\pm 11</math> % <sup>3)</sup></i>			
		The performance level: <b>level 2 <sup>2)</sup></b>	
<i>Expanded measurement uncertainty <math>\pm 11</math> % <sup>3)</sup></i>			

TEST PARAMETER Test method	Requirements acc. to <sup>1)</sup> HRN EN 407:2020	RESULT	
Tear resistance, (N) - before pretreatment HRN EN 407:2020, c 6.8	on the outer layer at least a value of 10 N	horizontal	Palm - black and withe fabric
			sample 1: 32,9
			sample 2: 27,1
		vertical	sample 3: 22,1
			sample 4: 25,3
		Lowest of the 4 values: <b>22,1</b>	
		Pass	
		horizontal	Back - green fabric
			sample 1: 24,2
			sample 2: 24,8
vertical	sample 3: 25,0		
	sample 4: 24,7		
Lowest of the 4 values: <b>24,2</b>			
Pass			
Tear resistance, (N) - after pretreatment HRN EN 407:2020, c 6.8	on the outer layer at least a value of 10 N	horizontal	Palm - black and withe fabric
			sample 1: 32,8
			sample 2: 35,5
		vertical	sample 3: 34,2
			sample 4: 31,3
		Lowest of the 4 values: <b>31,3</b>	
		Pass	
		horizontal	Back - green fabric
			sample 1: 31,0
			sample 2: 22,7
vertical	sample 3: 26,2		
	sample 4: 29,4		
Lowest of the 4 values: <b>22,7</b>			
Pass			

- 1) Requirements are not in the scope of accreditation and do not refer to test methods:  
HRN EN 407:2020 Protective gloves and other hand protective equipment against thermal risks (heat and/or fire) (EN 407:2020)
- 2) The decision rule applied: MK-LAB – General terms and conditions of the Laboratory department, rev 0.  
Result of the measurement is unambiguous as the decisions are not influenced by measurement uncertainties
- 3) Expressed values are calculated for a level of confidence of approximately 95 %, factor (k=2)

*Note: The test results refer only to the delivered sample. Individual test values of each test parameter and additional information can be given on request. The test report shall not be reproduced except in full. Samples are kept for two years and records for five years. Accredited test methods are in flexible accreditation scope. Methods marked with # are not in the scope of accreditation. We can't be held responsible for the translation of this document.*

Zagreb, 27.07.2021

Composed by,  
Testing Technologist:  
Kristina Šalin Zetaić, dipl. ing.

Revised by:

Approved by,  
Head of Laboratory, Deputy:  
Ljerka Zima, dipl. ing.



MIRTA-KONTROL  
d.o.o.

*Kristina Šalin Zetaić*

NC

*Ljerka Zima*