

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

EU TYPE EXAMINATION Nº:

UE-000104/00

APPLICATION DATE:

01/06/2021

DATE OF ISSUE:

25/10/2021

APPLICANT:

WELDAS EUROPE B.V
BLANKENWEG 18, 4612 RC BERGEN OP ZOOM
NETHERLAND

PPE TYPE:

GLOVE

REFERENCE (PPE):

10-2209

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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
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ANNEX. - EU Type-Examination Certificate

1. PPE IDENTIFICATION

1.1 Description and photography

Gloves that completely covers the hand adapting to its form with individual cover for each of the fingers.



1.2 Description of the components

PPE components according to the information supplied by the manufacturer:

Shoulder split cowhide, grey, white double cotton fabric, yellow woven cotton fabric, white rubber covered with nylon fabric.

1.3 Sizes

The size chart supplied by the manufacturer:

Size	Total length (mm)	Perimeter of the user's hand (mm)
7 ½ S	250	190
8 ½ M	250	216
9 L	250	229
9 ½ XL	250	241
10 ½ XXL	250	267

1.4 Samples given for certification

On 08/06/2021, five (5) size L, five (5) size M, five (5) size S, ten (10) size XL and five (5) size XXL arrive at the laboratory. A total of thirty (30) gloves.

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

This European Standard is a reference standard referred to in the specific European standards relating to or applicable to protective gloves. This standard should not be used alone, but should only be used in combination with the appropriate specific standard.

- **EN 388:2016/A1:2018** Protective gloves against mechanical risks

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

- Mechanical risks of abrasion.
- Mechanical risks of blade cut.
- Mechanical risks of tear.
- Mechanical risks of puncture.

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 harmonized 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 (Modulo 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 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 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 type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input checked="" 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 388:2016/A1:2018** Protective gloves against mechanical risks

Essential Health and Safety Requirements, according to Annex II of Regulation (EU) 2016/425	Clause(s) / sub-clause(s) of the standard EN 388:2016/A1:2018	Result
1.4 Manufacturer's instructions and information	7.8	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"/>
3.1.1 Impact caused by falling or ejected objects and collisions of parts of the body with an obstacle	4.2.2	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
3.3 Protection against mechanical injuries	4.1	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>

5. SIZING EVALUATION

- **EN 420:2003/A1:2009** Protective gloves – General requirements and test methods

Glove size: M

SAMPLE	MEASUREMENTS (glove)	DIMENSIONS (mm)
1	Contour of the glove (mm)	250
	Total length (mm)	250
2	Contour of the glove (mm)	246
	Total length (mm)	250
3	Contour of the glove (mm)	248
	Total length (mm)	250

Table of sizes, according to Technical File presented:

Size	Total length (mm)	Perimeter of the user's hand (mm)
7 ½ S	250	190
8 ½ M	250	216
9 L	250	229
9 ½ XL	250	241
10 ½ XXL	250	267

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

Acceptable
Not acceptable

6. DEXTERITY EVALUATION

- 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)
M	11,0
M	11,0
M	11,0

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
General point 4.3.1	Glove	EN 420:2003/A1:2009 , point 4.3.1	EN 420:2003/A1:2009, point 4.3.1	NA	NA	M
Determination of pH value point 4.3.2	Grey Leather	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.	± 0,4	AR-21-YL- 009053-01	M
	Glove back fabric			± 0,3	AR-21-YL- 008406-01	M
	Cuff fabric			± 0,3		M
	Glove trimming			± 0,3	AR-21-YL- 006703-01	M
	Inner white fabric			± 0,3	AR-21-YL- 008406-01	M
	Elastic			± 0,3	AR-21-YL- 006703-01	M
Cr (VI) Level point 4.3.3	Grey Leather	EN ISO 17075:2007	EN 420:2003/A1:2009, point 4.3.3 Must stay < 3mg/kg	NA	AR-21-YL- 008406-01	M
Determination of the free protein content, 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
Cleaning ⁽²⁾ point 4.4	Glove	-	EN 420:2003/A1:2009, point 4.4	NA	NA	NA
Sizing 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
Dexterity 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 1
Determination of the transmission of water vapor 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 ² ·h)	NT	NT	NT
Determination of water vapour absorption ⁽²⁾ 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 ² ·8h)	NT	NT	NT
Marking point 7.2		EN 420:2003/A1:2009, point 7.2		NA	NA	M

Information supplied by the manufacturer point 7.3	EN 420:2003/A1:2009, point 7.3	NA	NA	M
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- 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	Grey Leather	ISO 17075-1 o ISO 17075-2	EN ISO 21420:2020, point 4.2 ≤ 3mg/kg	NA	AR-21-YL-009053-01	M
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 ² per week	NA	NA	NA
Determination of pH point 4.2	Grey Leather	Leather ISO 4045 Others ISO 3071	EN ISO 21420:2020, point 4.2 Between 3,5 and 9,5	± 0,4	AR-21-YL-009053-01	M
	Glove back fabric			± 0,3	AR-21-YL-008406-01	M
	Cuff fabric			± 0,3	AR-21-YL-008406-01	M
	Glove trimming			± 0,3	AR-21-YL-006703-01	M
	Inner white fabric			± 0,3	AR-21-YL-008406-01	M
	Elastic			± 0,3	AR-21-YL-006703-01	M
Determination of azo colorants which release carcinogenic amines point 4.2	Grey Leather	Textile EN 14362-1 Leather ISO 17234-1	EN ISO 21420:2020, point 4.2 Shall be not detectable	NA	AR-21-YL-008406-01	M
	Glove back fabric + Cuff fabric			NA	AR-21-YL-008406-01	M
	Glove trimming			NA	AR-21-YL-006703-01	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	-	EN ISO 21420:2020, point 4.3 and 7.3.14	NA	NA	NA
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 this report	Level 1

Marking point 7.2.1.1 (d and f) and point 7.2.2 (e and g)	EN ISO 21420:2020, point 7.2.1.1 (d and f) and point 7.2.2 (e and g)	NA	NA	M
Information supplied by the manufacturer point 7.3.5 and 7.3.7	EN ISO 21420:2020, point 7.3.5 and 7.3.7	NA	NA	M

• **EN 388:2016/A1:2018** Protective gloves against mechanical risks

TEST ⁽²⁾	Glove	STANDARD	REQUERIMENTS	*UoM.	REPORT Nº	RESULT												
General requirements, point 4.1	-	EN 420	EN 388:2016/A1:2018, point 4.1 shall first meet all the applicable requirements of EN 420	NA	NA	M												
	Fabric / outer palm / glove cuff assembly	EN 388	EN 388:2016/A1:2018, point 4.1 At least Level 1 of one of 6.1, 6.2, 6.4, 6.5 or Level A in 6.3 of this standard.	NA	NA	M												
Abrasion resistance point 4.1	Fabric / outer palm / glove cuff assembly	EN 388:2016/A1:2018, point 6.1	EN 388:2016/A1:2018, point 6.1 <table border="1"> <tr><td>Level 1</td><td>≥ 100 cycles</td></tr> <tr><td>Level 2</td><td>≥ 500 cycles</td></tr> <tr><td>Level 3</td><td>≥ 2000 cycles</td></tr> <tr><td>Level 4</td><td>≥ 8000 cycles</td></tr> </table>	Level 1	≥ 100 cycles	Level 2	≥ 500 cycles	Level 3	≥ 2000 cycles	Level 4	≥ 8000 cycles	NA	AR-21-YL-008409-01	Level 3				
Level 1	≥ 100 cycles																	
Level 2	≥ 500 cycles																	
Level 3	≥ 2000 cycles																	
Level 4	≥ 8000 cycles																	
Blade cut resistance point 4.1	Fabric / outer palm / glove cuff assembly	EN 388:2016/A1:2018, point 6.2	EN 388:2016/A1:2018, point 6.2 <table border="1"> <tr><td>Level 1</td><td>≥ 1,2</td></tr> <tr><td>Level 2</td><td>≥ 2,5</td></tr> <tr><td>Level 3</td><td>≥ 5,0</td></tr> <tr><td>Level 4</td><td>≥ 10,0</td></tr> <tr><td>Level 5</td><td>≥ 20,0</td></tr> </table>	Level 1	≥ 1,2	Level 2	≥ 2,5	Level 3	≥ 5,0	Level 4	≥ 10,0	Level 5	≥ 20,0	±13%	AR-21-YL-008409-01	Level 1		
Level 1	≥ 1,2																	
Level 2	≥ 2,5																	
Level 3	≥ 5,0																	
Level 4	≥ 10,0																	
Level 5	≥ 20,0																	
Tear resistance point 4.1	Fabric / outer palm / glove cuff assembly	EN 388:2016/A1:2018, point 6.4	EN 388:2016/A1:2018, point 6.4 <table border="1"> <tr><td>Level 1</td><td>≥ 10 N</td></tr> <tr><td>Level 2</td><td>≥ 25 N</td></tr> <tr><td>Level 3</td><td>≥ 50 N</td></tr> <tr><td>Level 4</td><td>≥ 75 N</td></tr> </table>	Level 1	≥ 10 N	Level 2	≥ 25 N	Level 3	≥ 50 N	Level 4	≥ 75 N	±11%	AR-21-YL-008409-01	Level 4				
Level 1	≥ 10 N																	
Level 2	≥ 25 N																	
Level 3	≥ 50 N																	
Level 4	≥ 75 N																	
Puncture resistance point 4.1	Fabric / outer palm / glove cuff assembly	EN 388:2016/A1:2018, point 6.5	EN 388:2016/A1:2018, point 6.5 <table border="1"> <tr><td>Level 1</td><td>≥ 20 N</td></tr> <tr><td>Level 2</td><td>≥ 60 N</td></tr> <tr><td>Level 3</td><td>≥ 100 N</td></tr> <tr><td>Level 4</td><td>≥ 150 N</td></tr> </table>	Level 1	≥ 20 N	Level 2	≥ 60 N	Level 3	≥ 100 N	Level 4	≥ 150 N	±7,5%	AR-21-YL-008409-01	Level 3				
Level 1	≥ 20 N																	
Level 2	≥ 60 N																	
Level 3	≥ 100 N																	
Level 4	≥ 150 N																	
Cut resistance method TDM ⁽¹⁾ point 4.1	gloves palm	EN ISO 13997:1999 Table 2 and point 6.3.5 and clause 7	EN 388:2016/A1:2018, point 6.3 <table border="1"> <tr><td>Level A</td><td>≥ 2 N</td></tr> <tr><td>Level B</td><td>≥ 5 N</td></tr> <tr><td>Level C</td><td>≥ 10 N</td></tr> <tr><td>Level D</td><td>≥ 15 N</td></tr> <tr><td>Level E</td><td>≥ 22 N</td></tr> <tr><td>Level F</td><td>≥ 30 N</td></tr> </table>	Level A	≥ 2 N	Level B	≥ 5 N	Level C	≥ 10 N	Level D	≥ 15 N	Level E	≥ 22 N	Level F	≥ 30 N	±4%	AR-21-YL-008409-01	Level B
Level A	≥ 2 N																	
Level B	≥ 5 N																	
Level C	≥ 10 N																	
Level D	≥ 15 N																	
Level E	≥ 22 N																	
Level F	≥ 30 N																	
Impact protection⁽¹⁾ (optional) point 4.2.2	Glove impact area	EN 13594:2015, point 6.9	EN 388:2016/A1:2018, point 4.2.2 Table 7 of the standard EN 13594:2015 minimum Level 1	NT	NT	NT												

Marking point 7	EN 388:2016/A1:2018, point 7 in accordance with the applicable clauses of EN 420.	NA	NA	M
Information supplied by the manufacturer point 8	EN 388:2016/A1:2018, point 8 in accordance with the applicable clause of EN 420.	NA	NA	M

⁽¹⁾It is performed if the blade blunts in the knife shear strength test.

⁽²⁾ If the manufacturer's instructions indicate that they can be washed, the tests should also be carried out after the indicated pretreatment.

8. CONCLUSION

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

The PPE type **GLOVE** reference **10-2209**, 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, 25th of October 2021

Signature of the conformity evaluator: