

# Testing of Protective Gloves

Test item(s): **Leather oven glove and potholder**  
– **Vintage grey**

Type: **Protective gloves and other hand protective equipments against thermal risks**  
**(heat and/or fire)**

Customer: **Dutchdeluxes BV**  
**Leenderweg 182**  
**5555 CJ Valkenswaard**  
**Netherlands**

Applied method(s): **EN 407:2020, EN ISO 21420 and EN 388:2016**



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## 1. Description and identification of test item(s)

Following sample(s) were submitted and identified by the customer as:

Tested item(s): Leather oven glove and potholder  
 - Vintage Grey

Material description: Outer layer: 100% Buffalo leather, (1.3/ 1.5) mm  
 3-layer padding  
 Lining: 100% CO, roughened on both sides, 400 g/m<sup>2</sup>

Following features were observed by a technician of SGS Fimko:

Pictures of oven gloves:



Oven glove, layers: Outer layer/ padding/ lining

Pictures of potholders:



Potholder, layers: Outer layer/ padding/ lining/outer layer

## 2. Scope of testing

Testing date(s): 2023-03-06 - 2023-04-25

Tests were performed at the PPE laboratory of SGS Fimko Oy under accreditation scope, except determination of Chromium VI content which was subcontracted from another accredited laboratory.

Following tests were requested by the customer:

Requirement		Test method
Innocuousness - Chromium (VI) content* - pH value	EN 407:2020, 4.1 EN ISO 21420:2020, 4.2 a) and c)	ISO 17075-2:2017 ISO 4045:2018 EN ISO 3071:2006
Tear resistance - as new	EN 388:2016, 4.1, table 1	EN 388:2016, 6.4
Contact heat - as new	EN 407:2020, 4.5.3	EN 407:2020, 6.3 and EN ISO 12127-1:2015

\* Subcontracted from SGS Turkey (TÜRKAK AB-0690-T)

### 2.1 Sampling and conditioning

Receiving date(s): 2023-02-03 and 2023-04-24

Condition: Intact

Sampling method: The customer supplied samples whereof specimens were cut.

Conditioning: Samples were conditioned at least 24 hours in an atmosphere having a temperature of  $(20 \pm 2)$  °C and a relative humidity of  $(65 \pm 5)$  % before testing.

## 3. Test results

### 3.1 Chromium (VI) content

Chromium (VI) was not detected from the leather when tested according to ISO 17075-2:2017. The detection limit of test equipment is under 3,0 mg/kg.

The test was carried out accredited laboratory of SGS Supervise Gözetme Etüd Kontrol Servisleri A.Ş. (CE 2218), TR2285350, 2023-03-27.

### 3.2 pH value

Specimen	pH-value	
	Leather	Lining + padding
1	3,8	6,3
2	3,8	6,2
Mean	3,8	6,3

Specimens were cut from palm of the oven glove

### 3.3 Tear resistance

Type of testing machine: Lloyd, LRX Plus, 500 N  
 Speed of the drawing jaw: (100 ± 10) mm/min  
 Tested material: Outer layer

Gauge length: (50 ± 1) mm  
 Jaws: Corrugated, 50 mm

Specimen	Maximum force [N]
1 ↑	81
2 ↑	66
3 →	70
4 →	71
Lowest value	66

↑ → Direction of the glove.

### 3.4 Contact heat, as new

Oven glove	Contact temperature T <sub>c</sub> [°C]	Threshold time t <sub>t</sub> [s]	Hole formation, hardening, swelling, shrinking, melting
1	251	16	No
2	251	16	No
3	251	15	No
Lowest value		15	

Potholder	Contact temperature T <sub>c</sub> [°C]	Threshold time t <sub>t</sub> [s]	Hole formation, hardening, swelling, shrinking, melting
1	251	26	No
2	250	34	No
3	251	35	No
Lowest value		26	

#### 4. Summary

Test	Acceptance criteria according to	Comments
Chromium (IV) content - leather	EN ISO 21420:2020, 4.2 a) chromium (VI) content is less than 3,0 mg/kg	Oven gloves <b>meet the requirement</b>
pH value - padding + lining	EN ISO 21420:2020, 4.2 c) 3,5 ≤ pH value ≤ 9,5	Oven gloves <b>meet the requirement</b>
Tear resistance - as new	EN 388:2016, 4.1, Table 1 [N] Level 1      10 Level 2      25 Level 3      50 Level 4      75	Oven glove <b>meets the requirement</b>  <b>Level of performance: 3</b>
Contact heat - as new	EN 407:2020, 4.5.3 T <sub>c</sub> [°C]      t <sub>t</sub> [s] Level 1      100      ≥ 15 Level 2      250      ≥ 15 Level 3      350      ≥ 15 Level 4      500      ≥ 15	Oven glove and potholder <b>meets the requirement</b>  <b>Level of performance: 2</b>

The statement of conformity in this test report is only based on measured values by the laboratory and does not take their uncertainties into consideration. The relevant uncertainty value is obtainable upon request from the laboratory.

**End of test report**