



LAB-DE

BEST FOR YOUR TEST

## TEST REPORT

N° P-19.362

REPORT DATE : 21/11/2019

SUBJECT : Determination of mechanical properties of Gas Proof Sheet (Fumigation sheet)

BY ORDER OF : HKN 34  
Tekstil Urunleri, Ithalat Ihracat Toptan Ticaret  
Valikonagi Caddesi Haci Emin efendi sokak  
No 46 D 12 Nisantasi ISTANBUL, TURKEY.

The results of this report are exclusively related to the submitted and tested items. LAB-DE is not responsible for the information provided by the customer and doesn't guarantee the validity of the results in case of incorrect information that can affect the results.

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Recognition:



Frank De Velde Wilmer

Sr. Analyst  
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Ru El De Goitte

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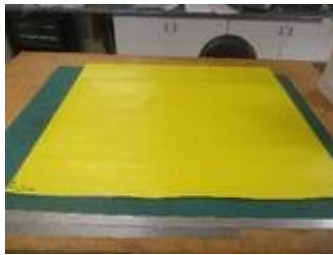
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**Test Report No: P-19.362 P-2/4**

### 1. Received sample

Receiving date of the sample : 18/11/2019  
Condition of the samples : undamaged  
  
Contact person : Hakan Devrim  
E-mail contact person : hakan@hkn34.net  
Description of the received sample :

1 type of Gas Proof Sheet (Fumigation sheet)



The sample was taken and sent by HKN34 to LAB-DE. The required specifications were provided by HKN34.

### 2. Conditioning

The sample was conditioned at 23°C and 50%RH during a minimum of 24 hours before testing.

### 3. Executed tests

Testing date : 20 - 21/11/2019  
Executor : Frank De Velde Wilmer

3.1 Determination of Breaking strength and extension at break, according to IS: 7016 (Part II) - 1981

3.2 Determination of tear strength, according to British Standard 3424-5:1982 (Method 7A)



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Test Report No: P-19.362 P-3/4

## 1. Results

Determination of Breaking strength and extension at break.

Used Equipment : Tensile tester GL-010  
Manufacturer : Zwick  
Type : BT1-FR010TH.A50  
Serial Number : 187525  
Test settings : Sample Width: 50 mm  
Grip-to-grip separation : 200 mm Test Speed: 100 mm/min

	<i>Warp</i>		<i>Weft</i>	
	<i>Breaking strength (N/50 mm)</i>	<i>Extension at break (%)</i>	<i>Breaking strength (N/50 mm)</i>	<i>Extension at break (%)</i>
<b>1</b>	1580	25	1800	23
<b>2</b>	1610	27	1820	22
<b>3</b>	1570	25	1830	23
<b>4</b>	1440	22	1730	23
<b>5</b>	1670	27	1550	25
<b>Average</b>	<b>1570</b>	<b>25</b>	<b>1750</b>	<b>23</b>
<b>Std. dev.</b>	<b>85,8</b>	<b>1,9</b>	<b>117</b>	<b>1,2</b>
<b>Required Specifications</b>	<b>Min. 1400</b>	<b>Min. 20</b>	<b>Min. 1250</b>	<b>Min. 20</b>

The fumigation sheet meets the requirements in both directions.

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Test Report No: P-19.362 P-4/4

Determination of tear strength.

Used Equipment : Tensile tester GL-010  
Manufacturer : Zwick  
Type : BT1-FR010TH.A50  
Serial Number : 187525

Test Settings : Travel: 50 mm  
Grip-to-grip separation: 100 mm Test Speed : 100 mm/min  
Sample Size : 200 x 60 mm (width tongue: 20mm)

	<b>Average Tear strength (N)</b>	
	<b>Warp</b>	<b>Weft</b>
<b>1</b>	166	166
<b>2</b>	163	131
<b>3</b>	160	131
<b>4</b>	166	116
<b>5</b>	132	126
<b>Average</b>	<b>157</b>	<b>134</b>
<b>Std. dev.</b>	<b>36</b>	<b>46</b>
<b>Required Specifications</b>	<b>Min. 150</b>	<b>Min. 120</b>

Please note that in the requirements, provided by the customer, no sample size was mentioned, which is an important parameter for this analysis.  
Standard sample size of 200 x 60 mm is used for this analysis.

  
Frank De Velde Wilmer



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