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		<i>Order No</i> <b>17533827</b>	<i>Project No</i> <b>5110592-2</b>

**Object:** Testing of loss in thickness and hardness caused by fatigue according to IKEA specification IOS-MAT-0076.

**Test material:** PUR foam  
 Sample 1: E2219  
 Sample 2: ES3536

The test material was received from the client 2011-08-11.  
 The commission was performed 2011-08-11 → 2011-10-26.

**Summary:**

Material	Loss in thickness caused by fatigue, $\Delta d$ (%)	Loss in hardness caused by fatigue, $\Delta H$ (%)
Sample 1	6	38
Sample 2	3	25

*The figures are rounded off to equal significant digits as in specification IOS-MAT-0076.*

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**Procedure  
and results:**

The samples were conditioned at  $23 \pm 3$  °C and  $50 \pm 5$  % relative humidity prior to measurements.

The loss in thickness and hardness caused by fatigue was performed according to ISO 3385:1995.

Each sample was tested regarding thickness and hardness before and after the fatigue test. The percentage loss of initial thickness and hardness were calculated. According to standard the median value shall be reported.

## Sample 1: E2219

	d <sub>1</sub> (mm)	d <sub>2</sub> (mm)	Δd (%)	H <sub>1</sub> (N)	H <sub>2</sub> (N)	ΔH (%)
1	48,5	47,0	3,2	83,8	54,6	34,8
2	48,8	45,9	6,0	78,5	46,4	41,0
3	48,4	45,7	5,5	77,5	47,7	38,4
<b>Median</b>			<b>5,5</b>			<b>38,4</b>

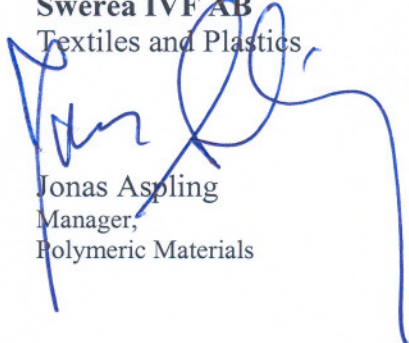
## Sample 2: ES3536

	d <sub>1</sub> (mm)	d <sub>2</sub> (mm)	Δd (%)	H <sub>1</sub> (N)	H <sub>2</sub> (N)	ΔH (%)
1	49,9	48,4	3,2	127,1	94,5	25,6
2	48,9	47,5	2,8	125,4	94,1	25,0
3	50,3	48,5	3,7	127,2	97,2	23,6
<b>Median</b>			<b>3,2</b>			<b>25,0</b>

All results relate only to the material tested.

Möln dal, 2011-10-26

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