

ENGINEERING FACULTY POLYMER ENGINEERING DEPARTMENT

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Report No: 62-1	Company Name: Yücel Büro Mobilyaları San. ve Tic. A. Ş.
Report Date: 20.11.2018	Reference: EN 13501-1, EN ISO 4892-2, ASTM D 638, Spectroscopic ve Analitical Methods
Receiving Date: 10.10.2018	Sample: Randomly Picked Seat Samples from Tizi Ouzou/Algeria Multipurpose Indoor Stadium, Athletics Stadium (50 000 seat capasity)

ANALYSIS and EVALUATION RESULTS

1- FIRE BEHAVIOUR

While Stadium Seat samples were tested according to EN ISO 11925-2 standard;

After the samples exposed to flame for 15 seconds, it was found to show no more than 150 mm of flame spread vertically from the flame application point within the next 20 s. It was evaluated that the samples contain flame retardant additive and burning behavior of Stadium Seat samples according to EN 13501-1 standard was classified as E class.

2- UV RESISTANCE

As a result of the test applied according to EN ISO 4892-2 standard;

There was no change in color and appearance of the samples, and the Gray Scale value was evaluated as 5.

3- RAW MATERIAL ORIGIN

Since the Tg and Tm values of the seat samples were obtained from the DSC analysis and ATR FT-IR analysis spectras were consistent with the original raw material values, it was evaluated that the seat samples were produced from original raw materials not recycled materials.

4- MECHANICAL PROPERTIES

When the seat samples were tested in accordance with ASTM D638 standard, *

It was determined that the Tensile Strength value was 34.15 MPa and the Elongation at Break value was 7.22%.

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