

Quality requirements and characteristics of integral foam parts

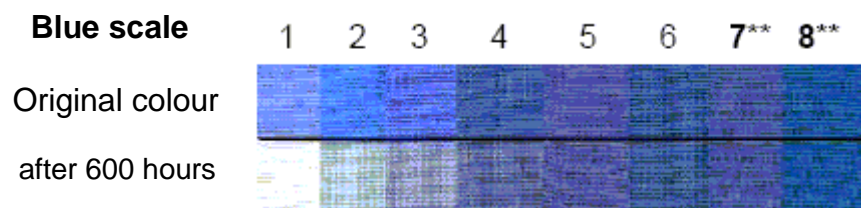
Integral foam parts are visible components for different uses, such as armrests, desk pads, seat and back parts.

1. UV stability and permissible colour variation**1.1 UV stability**

Fastness to light for plastics: Inspection request 600 hours

Test requirement: according to Vitra test instructions (acc. to EN ISO 105- B02)

Testing instrument: Suntest CPS , Xenon Lamp 1500 B + UV Filter + Quartz glass



** = fulfills Vitra requirement (at least grade 7)

Fastness to light with level 7 like gray scale Level 4

Embrittlement: bending test, breaking test 45° (after UV test)

1.2 Colour variation

Colorimetry with the CIE- Lab System

Kinds of light:

- D65, daylight
- F11, artificial daylight

Permissible variation:

The colour is visually appraised and measured additionally:

- $\Delta L < 1$
- $\Delta a < 1$
- $\Delta b < 1$
- $\Delta E < 1$

The visual verification takes precedence over the measured value. Little optical deviations to the original sample are permitted, according part 4 EN 1423:2004(D)

Metamerie Index: < 0,5

2. Gloss level

Surface gloss according to DIN 4554, Pt. 4.4.1, EN ISO 2813

Reflectance coefficient: conforming to specifications

3. Shore hardness

- Measurement according to DIN 53505, DIN EN ISO 868
- Hardness conforming to Vitra specification

4. Graining

- conforming to Vitra specification

Requirement to integral foam parts

Test	Vitranorm	Requirement
Resistance to abrasion, according to DIN 68 861, Pt. 2	7.014	2B
Surface brightness according to DIN 4554	7.012	$\geq 0,15$, $\leq 0,75$
Behaviour in dry heat, according to EN 12 722/21, DIN68 861 Behaviour in humid heat	7.131	100°C = 7C or cat. 5 85°C = 8B or cat. 5
Surface gloss, According to DIN 4554 Pt.4.4.1 EN ISO 2813	7.011	Conforming to specifications
Resistance to friction, According to DIN 54021 – Mode T / N	7.132	Grey scale \geq Grade 4/5