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TNO report



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Test report of the burning behaviour of materials
used in the interior construction of M3-category
motor vehicles

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TNO Automotive conforms to
ISO 9001.

Summary

The materials, make Elmosoft, type Leather according to Elmosoft collection # VI, have been tested according to Directive 95/28/EC [1].

The tests have been performed in order to judge whether or not the materials meet the requirements of above-mentioned regulation. The conclusion is that above-mentioned materials show compliance with these requirements.

The tests have been performed on behalf of type approval.

Remark: The Elmosoft collection # VI contains a range of coloured leather. The colour range is described in the information document.

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Appendices

- A Description of the materials
- B Detailed test results

1 Introduction

1.1 Purpose

The tests have been performed in order to judge whether or not the system meets the requirements of Directive 95/28/EC [1].

1.2 Description of the sample(s)

Table 1 Description of the samples

Sample number	Type
100148 till 100165	Leather according to Elmosoft collection # VI

For a more detailed description of the types is referred to Appendix A.

All samples have been handed in on 15 November 2004.
All samples which have been handed in, were test worthy.

1.3 Sampling procedure

The systems have been handed in by the manufacturer.
The test house has had no influence on the selection of the sample(s).

1.4 Application

The request for type approval was submitted on 12 November 2004.
Information document number: 20/12.

1.5 Submitted application information

The sample has been handed in together with:

- technical documentation of the product.

1.6 Method of testing

All tests have been performed according to the Annexes IV and V of Directive 95/28/EC [1].

1.7 Put out to contract

All tests have been performed by TNO-Building and Construction Research.

2 Test results

Horizontal burning rate according to Annex IV

The materials meet the requirements concerning horizontal burning rate as stated in paragraph 7.2.

Melting behaviour according to Annex V

The materials meet the requirements concerning melting behaviour as stated in paragraph 7.3.

3 Conclusion

The materials meet the requirements as stated in Directive 95/28/EC [1].

4 References

- 1 Directive 95/28/EC of the European Parliament and of the Council
Relating to the burning behaviour of materials used in the interior construction
of certain categories of motor vehicles,
The European Parliament and the Council of the European Union;
24 October 1995.

A Description of the materials

Table 2 Description of the samples

Type	Colour
100148 till 100152	Black
100153 till 100156	White
100157 till 100161	Black
100162 till 100165	White

Remarks:

For a more detailed description we refer to the information document.

B Detailed test results

Table 3 Horizontal burning rate according to Annex IV

Sample	Direction	15 Seconds exposed to the flame	1 st Measuring point reached	Burning rate
100148	1 st	yes	no	0 mm
100149	1 st	yes	no	0 mm
100150	1 st	yes	no	0 mm
100151	1 st	yes	no	0 mm
100152	1 st	yes	no	0 mm
100153	1 st	yes	no	0 mm
100154	1 st	yes	no	0 mm
100155	1 st	yes	no	0 mm
100156	1 st	yes	no	0 mm
100157	1 st	yes	no	0 mm

Table 4 Melting behaviour according to Annex V

Sample	First 5 minutes		Second 5 minutes	
	Falling of drops into the cotton	Ignition of the cotton	Falling of drops into the cotton	Ignition of the cotton
100158	no	no	no	no
100159	no	no	no	no
100160	no	no	no	no
100161	no	no	no	no
100162	no	no	no	no
100163	no	no	no	no
100164	no	no	no	no
100165	no	no	no	no