

PRÜFSTELLE TEXTIL



SÄCHSISCHES
TEXTIL
FORSCHUNGS
INSTITUT e.V.

Durch das DAP Deutsches Akkreditierungssystem Prüfwesen - vertreten im Deutschen Akkreditierungsrat - akkreditiertes Prüflaboratorium Die Akkreditierung gilt für die in der Urkunde aufgeführten Prüfverfahren.



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Von der Internationalen Gemeinschaft für Forschung und Prüfung auf dem Gebiet der Textilökologie (Öko-Tex) zugelassenes Prüfinstitut im Rahmen der Zertifizierung nach Öko-Tex Standard 100



Von der Federation Internationale de L'Automobile (FIA) Paris zugelassene Stelle zur Prüfung von Schutzkleidung für Auto-Rennfahrer - FIA standard 8856-2000



UNTERSUCHUNGSBERICHT | TESTREPORT

Order number STFI: 2137.6/08

Report date: 2008-11-26
Person responsible: Mehlhorn

Orderer: création baumann Weavers and Dyers Ltd.
Frau Doris Ringswald
4901 LANGENTHAL
SCHWEIZ

Test order:

Date: 2008-10-06
Order received: 2008-10-08
Material received: 2008-10-08

Material to analyse:

4 samples fabric

signed by orderer	color	code for order processing
STEEL BASE Art. 0 100 195	col. 56	Pm146_08_17
STEEL BASE Art. 0 100 195	col. 58	Pm146_08_16
STEEL BASE Art. 0 100 195	col. 59	Pm146_08_15
STEEL BASE Art. 0 100 195	col. 60	Pm146_08_18

The samples had been extracted by the orderer, concerning this no information is existing in the test department

Analysis content:

- (1) Remission and transmission in the visible light range (standard light D65) in accordance with DIN EN 410: 1998.
- (2) Remission and transmission in the global radiation range in accordance with DIN EN 410: 1998.
- (3) calculation of total energy permeability degree g_t of window system, following DIN EN 13363-1 2003 and approximated calculation of reduce factor F_c following DIN EN 14501 2006

Conditions for optical tests:

test parameter	symbol	range of radiation
light transmission degree	$\tau_{v,B}$	380...780 nm (standard light D65)
light remission degree	$\rho_{v,B}$	380...780 nm (standard light D65)
UV- transmission degree	τ_{UV}	280...380 nm (UV-radiation)
solar transmission degree	$\tau_{e,B}$	280...2500 nm (global radiation)
solar remission degree	$\rho_{e,B}$	280...2500 nm (global radiation)

Equipment: spectral photometer Lambda 900, PERKIN - ELMER Corp., USA
150 mm sphere

Test results:
(1) Light range
UV-range

Code	light transmission degree	light remission degree	light absorption coefficient	UV-transmission degree
Pm146_08	$\tau_{v,B}$	$\rho_{v,B}$	$\alpha_{v,B}$	τ_{UV}
17	0,3678	0,1625	0,4697	0,3706
16	0,6061	0,3583	0,0356	0,4608
15	0,4206	0,1682	0,4112	0,3888
18	0,4130	0,1808	0,4062	0,3850

(2) Global radiation range

Code	solar transmission degree	solar remission degree	solar absorption coefficient
Pm146_08	$\tau_{e,B}$	$\rho_{e,B}$	$\alpha_{e,B}$
17	0,3988	0,1777	0,4235
16	0,6117	0,3457	0,0426
15	0,4249	0,1718	0,4033
18	0,4194	0,1836	0,3970

(3) Total energy permeability degree g_t and reduce factor F_c

Code	g_t	F_c
Pm146_08		
17	0,60	0,84
16	0,54	0,75
15	0,61	0,84
18	0,60	0,84

F_c and g_t results are valid for the following presumptions in accordance with DIN EN 13363-1:

- Double glass with thermal protective covering , thermal permeability degree $U = 1,6 \text{ W/m}^2\text{K}$ and total energy permeability degree $g = 0,72$,
- sun protective material inside, closed.

The results are mean values from three measurements; spectrograms are kept in the test department.

The test results are referring to the submitted samples. These test report is not allowed to copy in parts.



Dr. Matthias Mägel
head of test department




Dipl.-Phys. Heidrun Mehlhorn
field responsible collaborator