



Certificate of Test

Sample Description: **3M™ Scotchlite™ Reflective Material
-5535 Silver Flame Resistant Transfer Film**

Customer: **3M Deutschland GmbH
Carl-Schurz-Str. 1
41453 Neuss
Germany**

Test Specification: EN ISO 20471:2013, High visibility clothing
EN ISO 14116:2008, Protective clothing against heat and flame
EN ISO 11611:2007, Protective clothing for welders clothing
EN ISO 11612:2008, Protective clothing against heat and flame
EN 469:2005, Protective clothing for firefighters

We hereby declare that the item has been tested by FIOH and complies with the requirements of EN ISO 20471:2013 for separate performance material, EN ISO 14116:2008, EN ISO 11611:2007, EN ISO 11612:2008 and EN 469:2005 as follows:

The clause of EN ISO 20471 (separate performance retroreflective material)			Assessment
6.1	New material		Complies
6.2	After test exposure	Test Details	
	Abrasion	7.4.1 ISO 12947-2, inverted mode, 5000 rubs	Complies
	Flexing	7.4.2 ISO 7854, Method A -7500 cycles	Complies
	Folding at cold temperatures	7.4.3 ISO 4675, /-20°C	Complies
	Temperature variation	7.4.4 EN ISO 20471, 12h (50°C)/ 20h (-30°C)	Complies
	Influence of rainfall	7.4.5 EN ISO 20471, Annex C	Complies
	Domestic washing, 65 cycles	7.5.2 EN ISO 6330 at 60°C, 6N/F	Complies
	Industrial washing, 15 cycles	7.5.2 ISO 15797 at 75°C with tumble and tunnel/ cabinet drying, prog 8	Complies
	Industrial washing, 5 cycles	7.5.2 ISO 15797 at 75°C with tumble and tunnel/cabinet drying, prog 2	Complies

Flame spread test			Assessment
-As new	Test Details		
EN ISO 11611	6.7	EN ISO 15025, method A	A1
EN ISO 11612	6.3.2	EN ISO 15025, method A	A1
EN ISO 14116	6.1	EN ISO 15025, method A	Complies
-After domestic washing, 65 cycles at 60°C			
EN ISO 11611	6.7	EN ISO 15025, method A	A1
EN ISO 11612	6.3.2	EN ISO 15025, method A	A1
EN ISO 14116	6.1	EN ISO 15025, method A	Index 3/65H/60
<i>Resistance to heat</i> -As new and after domestic washing, 65 cycles at 60°C			
EN ISO 11612	6.2.1	ISO 17493, at 180°C for 5 min	Complies
<i>Requirements of EN 469</i> -Clause annex B, Requirement for visibility			
	B.3.	Relevant clause ISO EN 20471	Complies
	B.3.1	ISO 17493, at 180°C for 5 min, CIE 54.2	Complies
	B3.2.	EN ISO 15025, method A (as new and after washing)	Complies
Exposure to radiant heat		EN ISO 6942, method A, 10 kW/m ² , CIE 54.2	Complies

Authorised by:


Erja Tammela
Senior Specialist

This assessment is based on test reports 241741T01, 2013-09-25, 231741T02, 2013-10-04 and 313955T01, 2015-0908. This assessment is valid only for the tested items and it does not signify any EC type-examination of complete personal protective equipment.