

ID Card Laboratory

Test laboratory accredited by DAkkS Deutsche Akkreditierungsstelle GmbH
in accordance with the standard DIN EN ISO/IEC 17025:2018.
The accreditation is valid for the tests listed in the certificate.

Contact:

Florian Hirschhalmer
Tel. +49 89. 43 182 - 275
hirschhalmer@fogra.org

2025-03-28

Test report

Digital copy of a test report by Fogra. In case of doubt, only the original written test report is binding.

Test report no.: 36526

Issued: 2025-03-28

Fogra expert: Florian Hirschhalmer

No. of pages: 9

Client: Konica Minolta Slovakia spol. s.r.o.
Peter Studený
Galvaniho 7/E
82104 Bratislava
Slovakia

Fogra
Forschungsinstitut für
Medientechnologien e.V.

Einsteinring 1a
85609 Aschheim b. München
Germany

Tel. +49 89. 431 82 - 0

www.fogra.org
info@fogra.org

Registered seat of the association is
Aschheim b. München, Germany

Date of order: 2025-03-25

Type of sample: UV-Inkjet printed cards
(Printing machine: AccurioJet KM1e;
PVC films: Klöckner Pentaplast)

Register court München
Association register no. 4909
Tax no. 143/215/00707 VAT
no. DE 129 514 828

Managing Director:
Dr. Eduard Neufeld

Samples received: 2025-03-25

Commerzbank München
Leopoldstraße 230
80807 München, Germany
BIC DRES DE FF 700
IBAN DE31 7008 0000 0308 5661 00

Order No. (Fogra): 36526

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Type of sample: UV-Inkjet printed cards
(Printing machine: AccurioJet KM1e;
PVC films: Klöckner Pentaplast)

Sample layout overview:



Electronic function:
none

Order No. (Fogra): 36526

Client: Konica Minolta Slovakia spol. s.r.o.

Type of sample: UV-Inkjet printed cards
(Printing machine: AccurioJet KM1e;
PVC films: Klöckner Pentaplast)

Summary of test results:

Code	Description of test	Standard of test method	No. of samples tested	Complies with		
				requirements of test standard	yes	no
DEL I20	Delamination	ISO/IEC 10373-1:2020/ Client	17	ISO/IEC 7810:2019/ Client	X	

Remarks:

The test results refer exclusively to the tested samples. The samples submitted to Fogra had been selected by the client. According to the client, the samples were manufactured using the final layout and production process.

Detailed records for each test are included in the appendices to this summary test report.

The Fogra ID Card Laboratory is not accredited for performing tests which are marked with white text on black background.

Further detailed information is available on request.

Fogra Forschungsinstitut für Medientechnologien e.V.
(Fogra Research Institute for Media Technologies)

Florian Hirschhalmer

Alexander Schiller

About this report:

This test report or parts of it may not be used for advertising by the client, if the use is deemed misleading by DAkKS or by Fogra. The publication of the test report, its duplication (even parts of it) and its use at a court of law must be approved in written form by DAkKS and Fogra.

For the evaluation of test results, our decision rule applies:

https://fogra.org/fileadmin/files/7_downloads/technische_beiraete/sicherheitsanwendungen/fogra-QM-Dokument-Entscheidungsregel.pdf

Please rate the Fogra card testing laboratory at:

https://fogra.org/fileadmin/files/7_downloads/technische_beiraete/sicherheitsanwendungen/fogra-qm-kdbfr-EN.pdf

Appendix:

DEL I20

Order No. (Fogra): 36526
Issued: 2025-03-28
Client: Konica Minolta Slovakia spol. s.r.o.
Type of sample: UV-Inkjet printed cards
(Printing machine: AccurioJet KM1e;
PVC films: Klöckner Pentaplast)
Date of testing: 2025-03-28

Description of test:

Delamination

Standard of test method: ISO/IEC 10373-1:2020/
Client
Standard of requirements: ISO/IEC 7810:2019/
Client

Complies with requirements: ☒ **yes**
☐ **no**

Appendix: DEL I20

Order No. (Fogra): 36526
Issued: 2025-03-28
Client: Konica Minolta Slovakia spol. s.r.o.

Test results and evaluation of each sample:

Sample no.	Type of sample	Peel strength in N/cm		Evaluation
		Test Section		
1	UV-Inkjet printed cards (C100 / M0 / Y0 / K0)	1 FS	8,1	☒ ok ☐ fault
2	UV-Inkjet printed cards (C100 / M0 / Y0 / K0)	1 FS	7,5	☒ ok ☐ fault
1	UV-Inkjet printed cards (C0 / M100 / Y0 / K0)	4 FS	6,8	☒ ok ☐ fault
2	UV-Inkjet printed cards (C0 / M100 / Y0 / K0)	4 FS	4,9	☒ ok ☐ fault
4	UV-Inkjet printed cards (C0 / M100 / Y100 / K0)	1 FS	7,4	☒ ok ☐ fault
5	UV-Inkjet printed cards (C0 / M100 / Y100 / K0)	1 FS	7,2	☒ ok ☐ fault
4	UV-Inkjet printed cards (C40 / M40 / Y40 / K40)	4 FS	6,0	☒ ok ☐ fault
5	UV-Inkjet printed cards (C40 / M40 / Y40 / K40)	4 FS	5,3	☒ ok ☐ fault

Appendix: DEL I20

Order No. (Fogra): 36526
Issued: 2025-03-28
Client: Konica Minolta Slovakia spol. s.r.o.

Test results and evaluation of each sample:

Sample no.	Type of sample	Peel strength in N/cm		Evaluation
		Test Section		
7	UV-Inkjet printed cards (C30 / M60 / Y90 / K0)	1 FS	7,9	☒ ok ☐ fault
8	UV-Inkjet printed cards (C30 / M60 / Y90 / K0)	1 FS	7,6	☒ ok ☐ fault
7	UV-Inkjet printed cards (C90 / M60 / Y30 / K0)	4 FS	8,1	☒ ok ☐ fault
8	UV-Inkjet printed cards (C90 / M60 / Y30 / K0)	4 FS	8,2	☒ ok ☐ fault
10	UV-Inkjet printed cards (C0 / M0 / Y100 / K0)	1 FS	7,4	☒ ok ☐ fault
11	UV-Inkjet printed cards (C0 / M0 / Y100 / K0)	1 FS	7,0	☒ ok ☐ fault
10	UV-Inkjet printed cards (C0 / M0 / Y0 / K100)	4 FS	5,8	☒ ok ☐ fault
11	UV-Inkjet printed cards (C0 / M0 / Y0 / K100)	4 FS	7,2	☒ ok ☐ fault

Appendix: DEL I20

Order No. (Fogra): 36526
Issued: 2025-03-28
Client: Konica Minolta Slovakia spol. s.r.o.

Test results and evaluation of each sample:

Sample no.	Type of sample	Peel strength in N/cm		Evaluation
		Test Section		
13	UV-Inkjet printed cards (C50 / M50 / Y50 / K50)	1 FS	8,6	☒ ok ☐ fault
14	UV-Inkjet printed cards (C50 / M50 / Y50 / K50)	1 FS	8,6	☒ ok ☐ fault
13	UV-Inkjet printed cards (C60 / M60 / Y60 / K60)	4 FS	9,1	☒ ok ☐ fault
14	UV-Inkjet printed cards (C60 / M60 / Y60 / K60)	4 FS	9,4	☒ ok ☐ fault
16	UV-Inkjet printed cards (C55 / M88 / Y0 / K37)	1 FS	9,0	☒ ok ☐ fault
17	UV-Inkjet printed cards (C55 / M88 / Y0 / K37)	1 FS	8,9	☒ ok ☐ fault
16	UV-Inkjet printed cards (C0 / M65 / Y100 / K0)	4 FS	7,7	☒ ok ☐ fault
17	UV-Inkjet printed cards (C0 / M65 / Y100 / K0)	4 FS	7,9	☒ ok ☐ fault

Appendix: DEL I20

Order No. (Fogra): 36526
Issued: 2025-03-28
Client: Konica Minolta Slovakia spol. s.r.o.

Test results and evaluation of each sample:

Sample no.	Type of sample	Peel strength in N/cm		Evaluation
		Test Section		
19	UV-Inkjet printed cards (C100 / M100 / Y0 / K0)	1 FS	8,0	☒ ok ☐ fault
20	UV-Inkjet printed cards (C100 / M100 / Y0 / K0)	1 FS	7,4	☒ ok ☐ fault
19	UV-Inkjet printed cards (C100 / M0 / Y100 / K0)	4 FS	9,2	☒ ok ☐ fault
20	UV-Inkjet printed cards (C100 / M0 / Y100 / K0)	4 FS	8,7	☒ ok ☐ fault
22	UV-Inkjet printed cards (C20 / M20 / Y20 / K20)	1 FS	5,2	☒ ok ☐ fault
23	UV-Inkjet printed cards (C20 / M20 / Y20 / K20)	1 FS	5,0	☒ ok ☐ fault
22	UV-Inkjet printed cards (C80 / M80 / Y80 / K80)	4 FS	8,3	☒ ok ☐ fault
23	UV-Inkjet printed cards (C80 / M80 / Y80 / K80)	4 FS	7,4	☒ ok ☐ fault

Appendix: DEL I20

Order No. (Fogra): 36526
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Test results and evaluation of each sample:

Sample no.	Type of sample	Peel strength in N/cm		Evaluation
Test Section				
25	UV-Inkjet printed cards (fotographic print)	1 FS	7,5	☒ ok
				☐ fault
25	UV-Inkjet printed cards (fotographic print)	4 FS	10,9	☒ ok
				☐ fault

Criterion of conformity according to ISO/IEC 7810:2019:

Minimum peel strength of 3,5 N/cm (component layers) or 2,5 N/cm (patch layers).

Remarks:

Test section according to ISO/IEC 10373-1:2020

FS = front side of the card

The test was carried out on two of the specified eight test sections.