

ADDITIONAL MEASUREMENTS

EU Regulation 161/2016

- » Laser coding properties PTS DF 105
- » Inkjet coding properties PTS DF 103
- » Print mottle for coding PTS DF 107
- » Verifying the compliance with ISO/IEC 15415
- » Water resistance ISO 18935
- » Abrasion test
- » Colour fastness DIN-ISO 105-Bo2
- » Peel adhesion of labels (Finat methods 1,2,5,9)
- » Box opening (tensile test)
- » Legibility after long-term storage
- » Climate influences
- » Braille test

Standards

- » Compression strength DIN 55440
- » Adhesive joint strength
- » Gluability
- » Bending stiffness DIN 53121 + ISO 2439
- » Creasability DIN 55437 – 2,3
- » Scott bond strength TAPPI 569
- » Printability, print mottle
- » Optical properties (brightness, gloss)
- » Mechanical properties (burst pressure, breaking length)

WE ASSIST YOU IN DEVELOPING YOUR PRODUCTS

PTS has many years of experience in the development of paper and paperboard, coating colour recipes and coatings, printing inks and packaging varnishes – from the initial product idea to market launch. We offer you a broad spectrum of services to meet current challenges – analytics, material tests, certification services, expert opinions, quality assurance and training. The combination of an accredited test laboratory with industrial standard developments enables us to solve issues in all parts of the value chain – professionally and systematically.

New statutory requirements that must currently be met by pharmaceutical cartons can be expected to become an issue also in many other sectors. PTS is doing extensive research to transfer and implement scientific-technical knowledge in industrial measurement systems. Our aim is to optimise the results of material-process combinations to make them an economic success – talk to us!



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IMPLEMENTING EU REGULATION 161/2016 - NEW REQUIREMENTS TO DRUG PACKAGING

IMPLEMENTING THE NEW REQUIREMENTS TO DRUG PACKAGING



GERMANY JOINS GLOBAL BATTLE AGAINST FALSIFIED MEDICINE BY IMPLEMENTING THE NEW EU REGULATION

EU Regulation 161/2016, which has come into effect in February 2017, makes the serial coding of packages for all medications subject to prescription mandatory by 9 February 2019. It is part of a worldwide campaign to improve the product safety of pharmaceuticals. Each package must be assigned a data matrix code that is transferred to a European data base to ensure its traceability along the entire supply chain and that its content can be rapidly verified for consumer protection.

Ensuring the compliance with statutory requirements

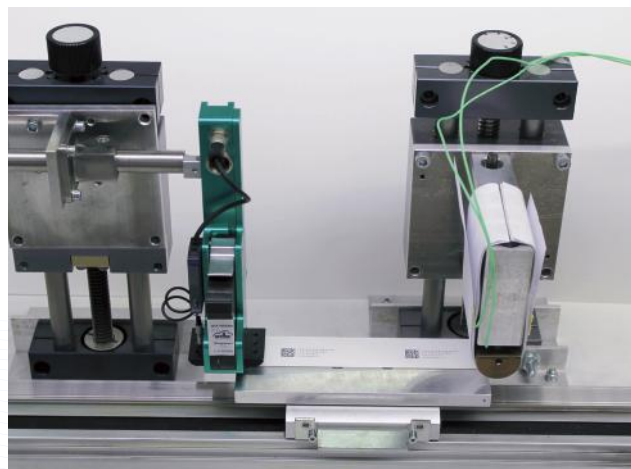
PTS has developed suitable measurements to certify the compliance of paperboard surfaces with current requirements. The coding behaviour of samples can be tested in an industrial measuring section that offers three print heads with more than ten different inks. Three different laser systems are available to test the laser coding properties. The quality of resulting data matrix codes may be assessed by means of different verifiers specified by ISO/IEC 15415.

Inkjet codability according to PTS Method DF 103

Each sample is printed with ten GS1 matrix codes (26*26) at a resolution of 300 dpi and verified according to ISO/IEC 15415. The code's wiping or rub resistance is tested after a drying time of 0,3 sec. The print density and interval between printing and wiping may be varied in the test.

Laser codability according to PTS Method DF 105

To achieve optimal results, paperboard samples are coded by the laser ablation method at a marking speed of 50 m/min, using either a conventional laser or one of the recently developed pharmaceutical laser systems. The codes are assessed by means of ISO/IEC 15415 verifiers. PTS certifies the results to contribute to higher safety standards and legal compliance. Measurements can be performed in an accredited test laboratory or industrial measuring section and are constantly improved to meet the high requirements of industrial customers in the area of packaging coding. All materials, printing and measurement methods must be optimally adjusted to efficiently obtain reliable results. If desired, a test certificate can be issued jointly with the Folding Carton Association FFI and the Research Group Pharmaceutical Cartons FFPI.



Durably legible codes

Apart from verifying data matrix codes, we can also test their stability. Suitable qualitative tests are evaluations of

- » Water resistance
- » Climate resistance
- » Light fastness
- » Ageing resistance
- » Rub resistance

The experts of our certified laboratory can also test the tampering protection and long-term usability of drug packaging.

- » Peel adhesion of labels (Finat 1,2,5,9)
- » Box opening (modified tensile test)
- » Braille test

Moreover, we can examine the transport behaviour and general converting quality of packages:

- » Compression strength
- » Creasability and ply bond strength
- » Adhesive joint strength, gluability
- » Mechanical properties (bursting pressure, breaking length)
- » Optical properties (brightness, gloss)
- » Printability (mottling, colour reproduction)

More detailed investigations into the causes of converting failures require the specific testing of chemical-physical properties and relationships:

- » Porosity
- » Penetration and wetting properties
- » Ink absorption, surface tension
- » Topography
- » Ink adhesion
- » Verification of specified paper and printing ink properties