FACTSHEET

Textile Testing

TESTEX®

- Physical and chemical textile testing to ensure textile quality
- Carried out in accordance with ISO and EN standards
- Accredited for compliance with ISO 17025 (STS 228)

TESTEX uses the latest testing instruments to perform multi-faceted, comprehensive tests on fibres, single and ply yarns, woven and knitted fabrics, non-wovens and finished products. Tests are carried out predominantly in accordance with ISO and EN standards and are accredited for compliance with ISO 17025 (STS 228).

TESTEX offers the following tests, for example:

Fabric testing

- Fabric decomposition
- Fabric weight, fabric density
- Dimensional stability (e.g. to washing)
- Tear resistance
- Seam resistance, Seam slippage strength
- Bursting strength
- Pilling test (Martindale, ICI)
- Crease recovery angle, anti-crease properties
- Abrasion test (Martindale)
- Snagging test (ProMace, Snag Pod)
- Water absorption (Bundesmann shower test)
- Water repellency (Spray test)
- Water and oil repellency (Scotchgard)
- Scrub test
- Tenacity: strip and grab tensile test

Clothing physiology tests

- Water impermeability
- Water vapour transmission resistance
- Thermal transmission resistance
- Moisture management
- Air permeability

Colour fastness

- Fastness to light (ISO 105-B02)
- Fastness to weathering (ISO 105-B04)
- Fastness to light and perspiration (ISO 105-B07)
- Fastness to water (ISO 105-E01)
- Fastness to water spotting (ISO 105-E07)
- Fastness to ironing (ISO 105-X11)
- Fastness to household washing (ISO 105-C06/C08)
- Fastness to seawater (ISO 105-E02)
- Fastness to chlorinated water (ISO 105-E03)
- Fastness to dry cleaning (ISO 105-D01)
- Fastness to solvents (ISO 105-X05)
- Fastness to sodium hypochlorite bleach (ISO 105-N01)
- Fastness to peroxide bleach (ISO 105-N02)
- Fastness to rubbing (ISO 105-X12)
- Fastness to perspiration (ISO 105-E04)
- Fastness to saliva and perspiration (STANDARD 100 by OEKO-TEX®)

Colour, whiteness and UV measurement

- Colour difference measurement (CIE Lab/CMC 2:1)
- Colour measurement of fluorescent dyestuffs (ISO 20471)
- Whiteness measurement (Berger, Ganz Griesser)
- Colour visibility test according to Farnsworth-Munsell
- UV transmission measurement according to UV STANDARD 801, AS/NZ 4399, EN 13758-1
- Retroreflection measurement of retroreflective stripes (retroreflectometer)

Dyestuff analysis

- Testing for allergenic dyestuffs
- Testing for prohibited azo dyestuffs according to EN 14362-1 & 3
- Testing for carcinogenic dyestuffs
- Qualitative dyestuff analysis

Fire testing

- Burning behaviour (16CFR1610)
- Limited flame spread rate (EN ISO 15025)
- Burning behaviour of curtains and net curtains (EN 1102)
- Flammability of vertically oriented specimen (EN ISO 6940)
- Flame spread rate (EN ISO 6941)
- Burning behaviour of children's nightwear (EN 14878)

Yarn testing Yarn count, single and ply yarn twist, yarn tenacity, yarn evenness

Fibre testing Fibre length, fibre count, fibre cross-section, fibre damage, detection of genetically modified organisms (organic cotton)

Expert opinions for damage claims and courts of law

- Advice and assistance
- Expert opinions in cases of dispute and damage claims

Detergent tests

- Washing power, stain removal
- Colour preservation
- Greying
- Decrease in tenacity
- Incineration residue
- Organic residues
- Degree of polymerisation (DP)
- Reflectance value

Residue analysis

- Residual bast content (degumming)
- Softener content
- Content of solvent-soluble substances
- Water-soluble content
- Acid-soluble content
- Surfactants

Trace analysis

- Oil and grease detection
- Iron detection
- Chloride detection
- Sulphate detection
- Blood detection
- Micro-organisms – bacteria count
- Infrared spectroscopy analysis

Human ecology testing

- pH according to ISO 3071 and other standards
- Formaldehyde according to JIS L 1041 and other standards (qualitative and quantitative)
- Heavy metals in the extract and after total digestion (ICP-MS)
- XRF analysis (e.g. Lead, Cadmium, Nickel)
- Chromium VI according to ISO 17075
- Nickel release according to EN 12472 and EN 1811
- Chlorinated benzenes and toluenes (chloro organic carriers)
- Phenols (chlorinated and others)
- Pesticides
- Phthalates (PVC plasticisers) e.g. according to ISO 14389, EN 15777 or CPSC
- Organic tin compounds, e.g. according to ISO 17353
- Permethrin
- PCBs
- PFCs (e.g. PFOS, PFOA, Fluortelomers)
- PAHs (polcyclic aromatic hydrocarbons)
- APEOs/APs (alkylphenol ethoxylates/ alkylphenols)
- Isothiazolinone
- Anthraquinone
- Quinoline
- Dimethylfumarate
- Solvent residues (e.g. DMF, DMAc, NMP)
- SCCP (short chain chlorinated paraffins)
- UV stabilisers
- Dyestuff analysis (arylamines (azodyes))
- Emission of volatiles
- Disperse dyes (allergens)
- Odour testing
- Flame retardants (brominated and phosphorinated)
- Preservative agents (in leather)
- VOC's (e.g. chlorinated solvents, glykols, cresols)

More information

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