

Meeting NFPA 1970 Chemical Requirements



Hohenstein

Independent Testing Laboratory

- Innovative, tailored R&D solutions
- Testing, certification & evaluation
- Knowledge transfer & training

Founding member of OEKO-TEX® Association

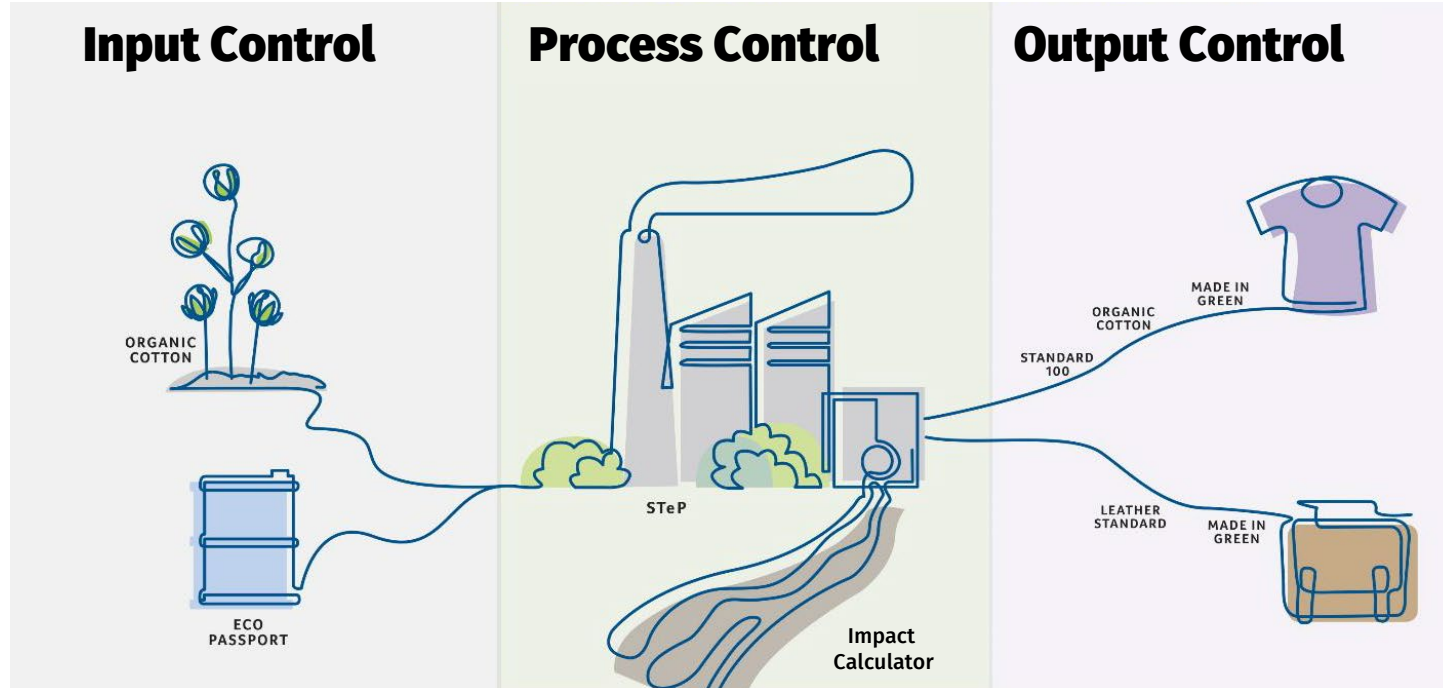


Worldwide Consistency & Integrity

All laboratories accredited to ISO 17025

OEKO-TEX® System

Independently verified certifications



1st textile product standard to certify consumer protection

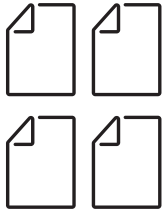
17 member institutes
specializing in textiles/leather

35,000+ companies
working with OEKO-TEX®

Continuous implementation of
global regulations

Driven by **sustainability**
& grounded in **science**

Active Now



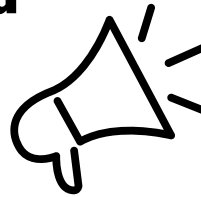
Combination of
**4 existing
standards**



Existing
certifications
must be updated



Includes **restricted
substance** list
requirements



Optional
communication
around **PFAS**

NFPA®

1970

Standard on
Protective Ensembles for Structural and
Proximity Firefighting, Work Apparel,
Open-Circuit Self-Contained Breathing
Apparatus (SCBA) for Emergency Services,
and Personal Alert Safety Systems (PASS)

2025

Includes
NFPA 1971 | NFPA 1975 | NFPA 1981 | NFPA 1982



Approach to RSL Criteria in NFPA 1970

- NFPA Technical Committee based on **OEKO-TEX® & AFIRM RSLs**
- **Compiled list** with criteria/methods
- Only “**recognized components**”
can be used in finished items



Chemical Class or Group	Restricted Substance(s)	Maximum Level
Flame retardants	Each individual substance in Table 3	10 mg/kg
	Sum of all chemicals in Table 3	50 mg/kg
Heavy metals, extractable	Antimony	30.0 mg/kg
	Arsenic	1.0 mg/kg
	Barium	1000 mg/kg
	Cadmium	0.1 mg/kg
	Chromium	2.0 mg/kg
	Chromium VI	0.5 mg/kg
	Cobalt	4.0 mg/kg
	Copper	50.0 mg/kg
	Lead	1.0 mg/kg
	Mercury	0.02 mg/kg
	Nickel	4.0 mg/kg
	Selenium	100 mg/kg
Monomers	Styrene	0.005 mg/m ³
	Vinyl chloride	0.002 mg/m ³
Perfluorinated and polyfluorinated alkyl substances (PFAS)	Total fluorine content [includes non-PFAS]	Report
	Sum of C7-C14 PFCA-related substances	260 µg/kg
	Sum of PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE	1 µg/m ²
	Each and sum of PFHpA, PFNA, PFDA, PFUdA, PFDoA, PFTdA, PFTeDA and further perfluorinated carboxylic acids in Table 4	25 µg/kg
	Sum of perfluorinated sulfonic acids in Table 4	250 µg/kg
	Each partially fluorinated carboxylic/sulfonic acid in Table 4	250 µg/kg
	Sum of partially fluorinated linear alcohols in Table 4	250 µg/kg
	Sum of esters of fluorinated alcohols with acrylic acid in Table 4	250 µg/kg
	Sum of PFOA and salts	25 µg/kg
	Sum of PFOA-related substances	250 µg/kg
UV absorbers or stabilizers	2-Benzotriazol-2-yl-4,6-di-tert-butylphenol (UV 320)	1000 mg/kg
	2,4-Di-tert-butyl-6-(5-chlorobenzotriazol-2-yl) phenol (UV 327)	1000 mg/kg
	2-(2H-Benzotriazol-2-yl)-4,6-di-tert-pentylphenol (UV 328)	1000 mg/kg
	2-(2H-Benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV 350)	1000 mg/kg

C9-C14 PFCA-related substances		
Perfluorooctane sulfonic acid and sulfonates	1763-23-1, et. al.	PFOS
Perfluorooctane sulfonamide	754-91-6	PFOSA
Perfluorooctane sulfonyl fluoride	307-35-7	PFOSF/POSF
N-Methyl perfluorooctane sulfonamide	31506-32-8	N-Me-FOSA
N-Ethyl perfluorooctane sulfonamide	4151-50-2	N-Et-FOSA
N-Methyl perfluorooctane sulfonamide ethanol	24448-09-7	N-Me-FOSE
N-Ethyl perfluorooctane sulfonamide ethanol	1691-99-2	N-Et-FOSE
Perfluoroheptanoic acid and salts	375-85-9, et. al.	PFHpA
Perfluorooctanoic acid and salts	335-67-1, et. al.	PFOA
Perfluorononanoic acid and salts	375-95-1, et. al.	PFNA
Perfluorodecanoic acid and salts	335-76-2, et. al.	PFDA
Henicosfluoroundecanoic acid and salts	2058-94-8, et. al.	PFUdA
Tricosfluorododecanoic acid and salts	307-55-1, et. al.	PFDoA
Pentacosfluorotridecanoic acid and salts	72629-94-8, et. al.	PFTdA
Heptacosfluorotetradecanoic acid and salts	376-06-7, et. al.	PFTeDA
Further perfluorinated carboxylic acids		
Perfluorobutanoic acid and salts	375-22-4, et. al.	PFBA
Perfluoropentanoic acid and salts	2706-90-3, et. al.	PFPeA
Perfluorohexanoic acid and salts	307-24-4, et. al.	PFHxA
Perfluoro(3,7-dimethyloctanoic acid) and salts	172155-07-6, et. al.	PF-3,7-DMOA
Perfluorinated carboxylic and sulfonic acids under observation		

- Requirements “**fixed**” at **2024 levels**
- Specified materials and components must go through **separate testing**
- Allowed to use “**attestation**” **organization** that provides certificate indicating compliance with NFPA 1970

RSL Requirements in NFPA 1970

OEKO-TEX® Test Criteria

Globally Harmonized Chemical Management

Substances that may be harmful to health

- polycyclic aromatic hydrocarbons (PAH)
- certain alkylphenols & alkylphenolethoxylates
- allergy-inducing dispersion dyes
- pesticides
- chlorinated benzenes & toluenes
- volatile components
- chlorinated phenols

Legally banned & controlled substances

- certain azo colorants
- carcinogenic dyes
- pentachlorophenol
- formaldehyde
- phthalates
- PFAS
- heavy metals
- banned flame retardants
- tin-organic compounds

Biologically active & flame-retardant substances

only ACP accepted for OEKO-TEX® STANDARD 100 can apply

Chemical Testing

Requirements for Textiles



Limits

Apply at material/
component level



Documentation

Test report + verification of
compliance



Validity

Duration of 2025 edition
- Recertification can use the same
test reports



New Testing Required

Material changes require
new testing



Lab

Must be independent & ISO
17025 accredited

NFPA 1970

Edition: 2025

Update certificates by
September 2025

Compliance Options

Hohenstein Services for NFPA 1970 Certificate Holders

OEKO-TEX® STANDARD 100 Certification

- Qualified Certificates: Any issued after April 1, 2024 (including PPE supplement)
- Turnaround: 4-6 weeks (New certificates +renewals)



RSL Testing

- Test Package: NFPA 1970-specific
- Turnaround: 7-10 days



Identify the Best Approach

Consider Specific Product Needs & Supplier Certifications

Test cost
~ \$1800/material
Reduce costs with
supplier certificates

Annual Renewal
\$1150/year
Not NFPA 1970
requirement

\$1500 Quality Audit
1st, then every 3rd year

**OEKO-TEX®
STANDARD 100**
(& PPE Supplement)



Compliance
with NFPA 1970



Test Report

**NFPA 1970
RSL Testing**

Test cost:
\$3500/material
Lab in Hong Kong

Billed via
US office

Next Steps for OEKO-TEX® STANDARD 100 Certificate Holders



Prepare list of product/material codes relevant to your NFPA 1970 certificate

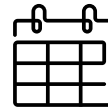


Request the NFPA 1970 cover letter...



At Renewal:

- Respond “yes” to question 5 in 2025 application
- Include NFPA 1970 product list
- Optional: add product numbers to certificate scope



Between Renewals:

Email NFPA 1970 product list
+ relevant STANDARD 100 certificate(s)



To also change certificate scope,
include Declaration of Conformity
with updated scope

NFPA 1970 Cover Letter

Accompanies OEKO-TEX® STANDARD 100
certificate & test report.

Certificate

Certificate Number:

This Certificate provides a summary of results for the product described below, which has been tested by Hohenstein and found to be in compliance with the indicated test procedure.

This Certificate shall only be considered valid when accompanied by the referenced Test Report in full.

Applicant/Supplier:

Manufacturer:

Manufacturing Site/Location:

Testing Location:

Tested Material(s)/Model(s):

Standard(s)/Test
Procedure(s):

NFPA 1970-2025 Section 8.21 Acceptable Levels of Restricted Substances
in Specified Protective Element Recognized Components.
NFPA 1970-2025 Section 9.30.1 Tests for Acceptable Levels of Specific Restricted Substances.

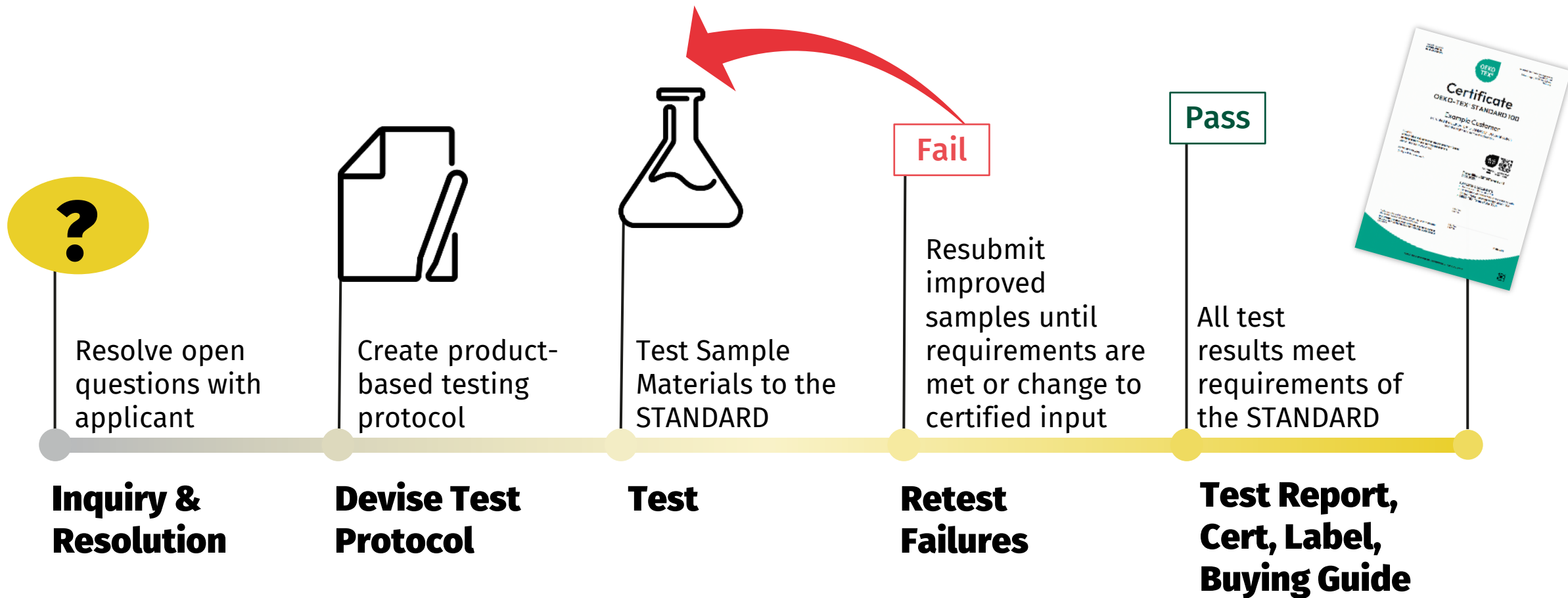
Test Result(s):

Material model
style
designated
meets the performance requirements specified in NFPA 1970-2025 Section 8.21
as evaluated in accordance with NFPA 1970-2025 Section 9.30.1 Tests
for Acceptable Levels of Specific Restricted Substances.
Test results are included in the associated Test Report.

Test Report Number:

Date

Authorized Signature or company stamp



Certification Process

OEKO-TEX® STANDARD 100

Questions?

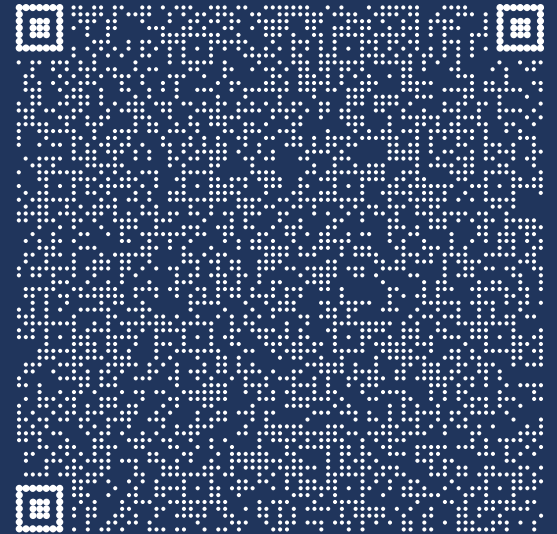
Ben Mead

B.Mead@hohenstein.com

260.740.2166

Hohenstein.US

SCAN FOR
CONTACT DETAILS





Hohenstein.US/NFPA

Advanced Textiles
EXPO[®]

See You Next Year



 **ORLANDO, FL**
Nov. 3-5, 2026



JOIN US NEXT YEAR