



Innovator of Safety and Protection Fibers

ACID/ALKALI/SOLVENT
UV **RESISTANT**

FLAME/HEAT
RESISTANT
LOI=43% / 250°C

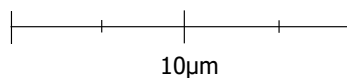
NO SMOKE / NO TOXIC OFF GASING
Ds/g = 0 after 4min
SO₂/HCL/HBr/HF/HCN - not detectable

ANTI ODOR
Staph. Aureus = -99%
E.Coli = -99%

INHERENT
PERMANENT
PROPERTIES

HIGH COMFORT
Moisture regain = 12%

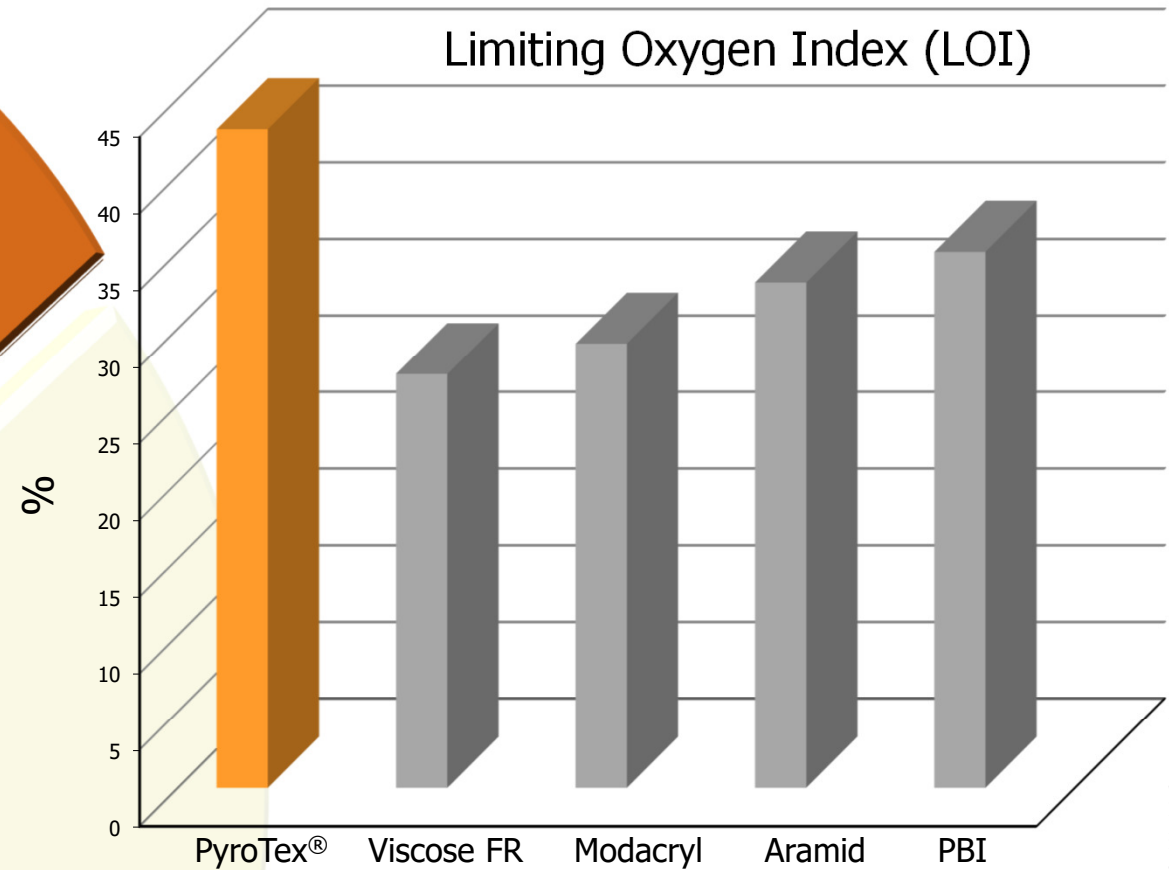
HIGH INSULATION
0.03 W/mK





FLAME/HEAT RESISTANT

PyroTex[®]
classic



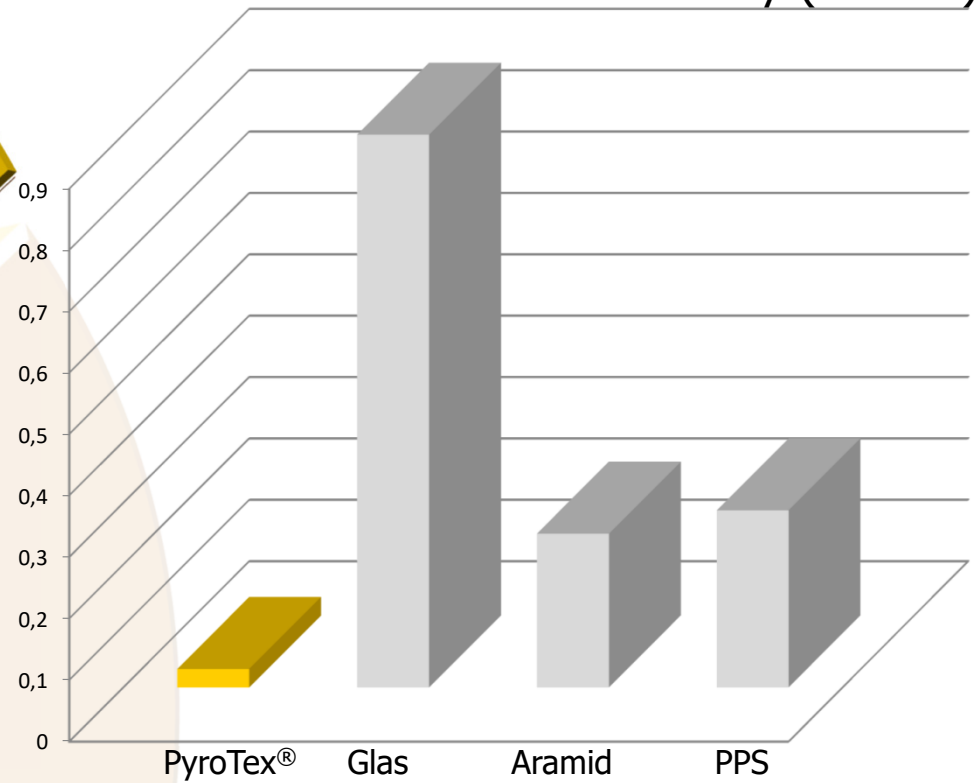
Determines the relative flammability of polymeric materials.
The higher the LOI the better the flame resistance.



HIGH INSULATION

PyroTex[®]
classic

Thermal Conductivity (k-value)

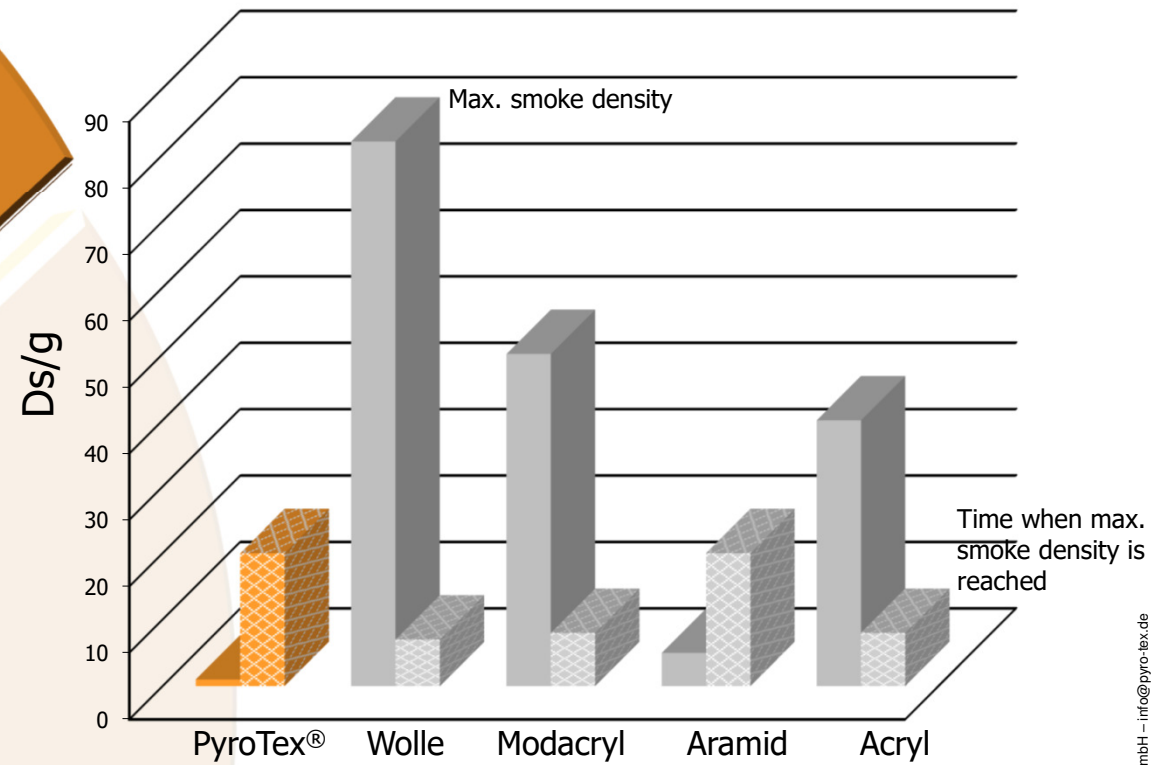


Determines the ability of a material to conduct temperature.
The lower the value, the better the thermal protection.

NO SMOKE

PyroTex[®]
classic

NBS Smoke Density



Measures the specific optical density of smoke submitted from materials



NO TOXIC OFF GASSING

PyroTex[®]
classic

Analysis of Combustiongases AFNOR NF X 70-100 (2001)

Testing Temperature: 600°C (1,112°F, 40min)

Sulfordioxide SO ₂	not detectable
Hydrogen Chloride HCl	not detectable
Hydrogen Bromide HBr	not detectable
Hydrogen Fluoride HF	not detectable
Hydrogen Cyanide HCN	not detectable
Carbon Monoxide CO	35ppm

Fabric made of 100%:

CO
HCN

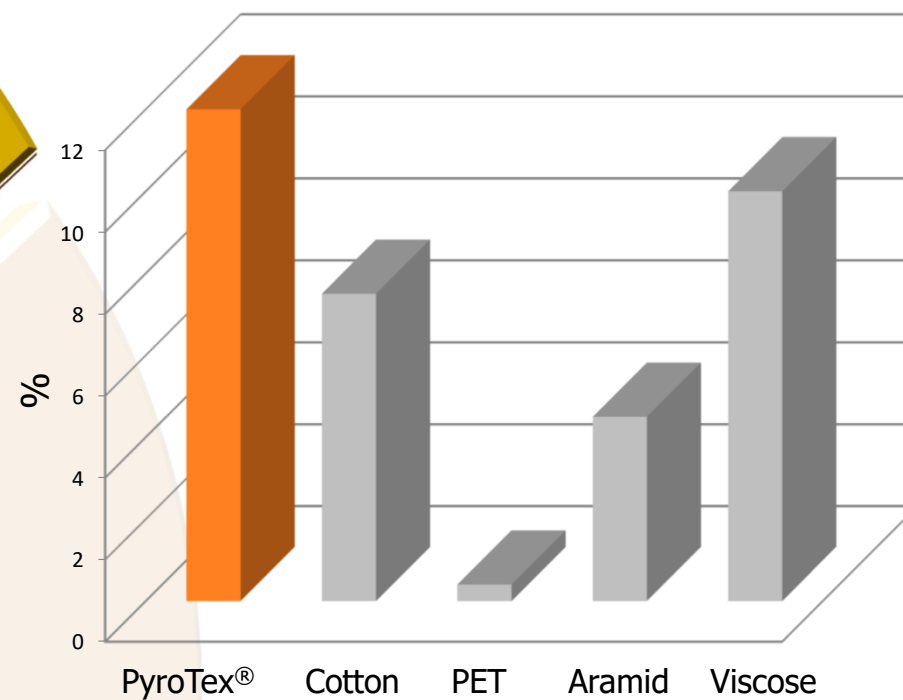
Wool	PyroTex [®]	Modacrylic	
5.009	35	5.486	[ppm]
259	n/d	1.209	



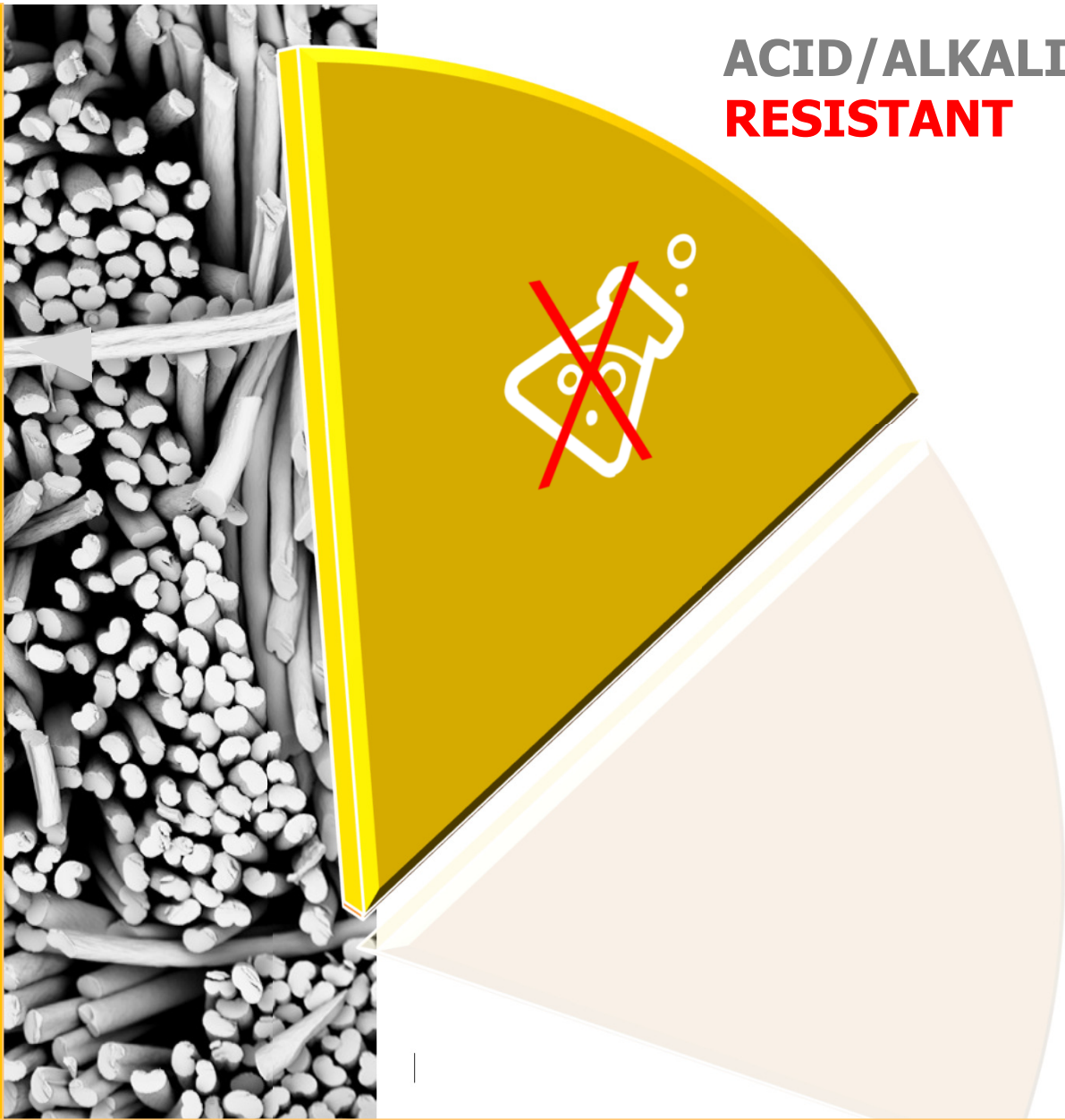
HIGH COMFORT

PyroTex[®]
classic

Moisture Regain

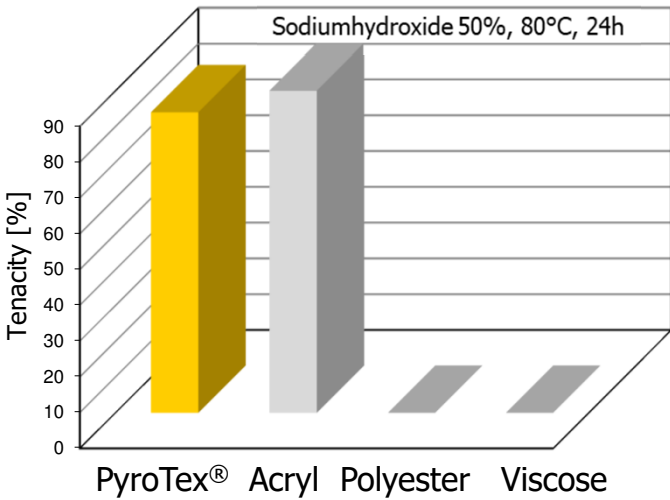
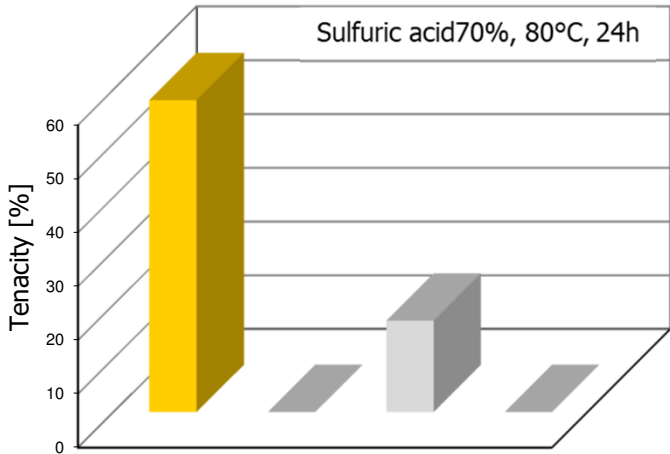


Different to other synthetic fibers PyroTex[®] is hydrophilic and can absorb up to 12% moisture.



ACID / ALKALINE / SOLVENT RESISTANT

PyroTex[®]
classic





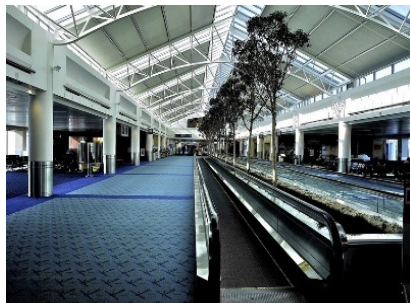
PPE

Products

- Base layer
- Uniforms
- Workwear
- Battings
- etc.

Why PyroTex® classic?

- Flame resistant
- Heat resistant
- Does not melt
- hydrophilic
- Oeko Tex Class I
- dyable
- high insulation



Public Buildings

Venues

- Airports
- Hotels
- Theaters
- etc.

Why PyroTex® classic?

- Flame resistant
- Heat resistant
- No smoke
- No toxic off gasing
- UV resistant
- dyable



Filtration

Applications

- Asphalt
- Kiln
- Steel
- etc.

Why PyroTex® classic?

- Cont. Heat up to 250 °C
- Flame resistant
- Acid resistant
- Alkaline resistant
- Hydrolysis resistant
- Solvent resistant



Public Transport

Applications

- Upholstery
- Fireblocker
- Insulation
- etc.

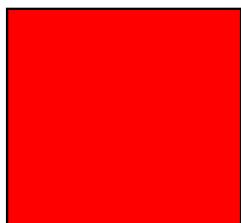
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- Heat resistant
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- No toxic off gasing
- UV resistant
- dyable

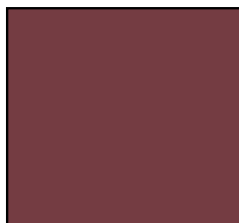
PyroTex®
classic



YELLOW



RED



GARNET



GREY



LIGHT BLUE



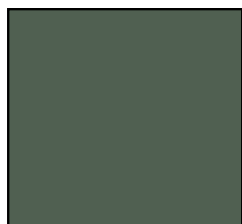
BLUE



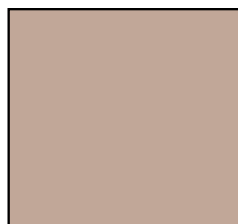
NAVY



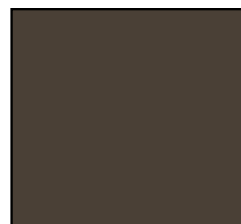
GREEN



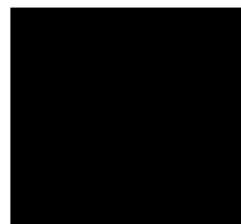
OLIVE



BEIGE

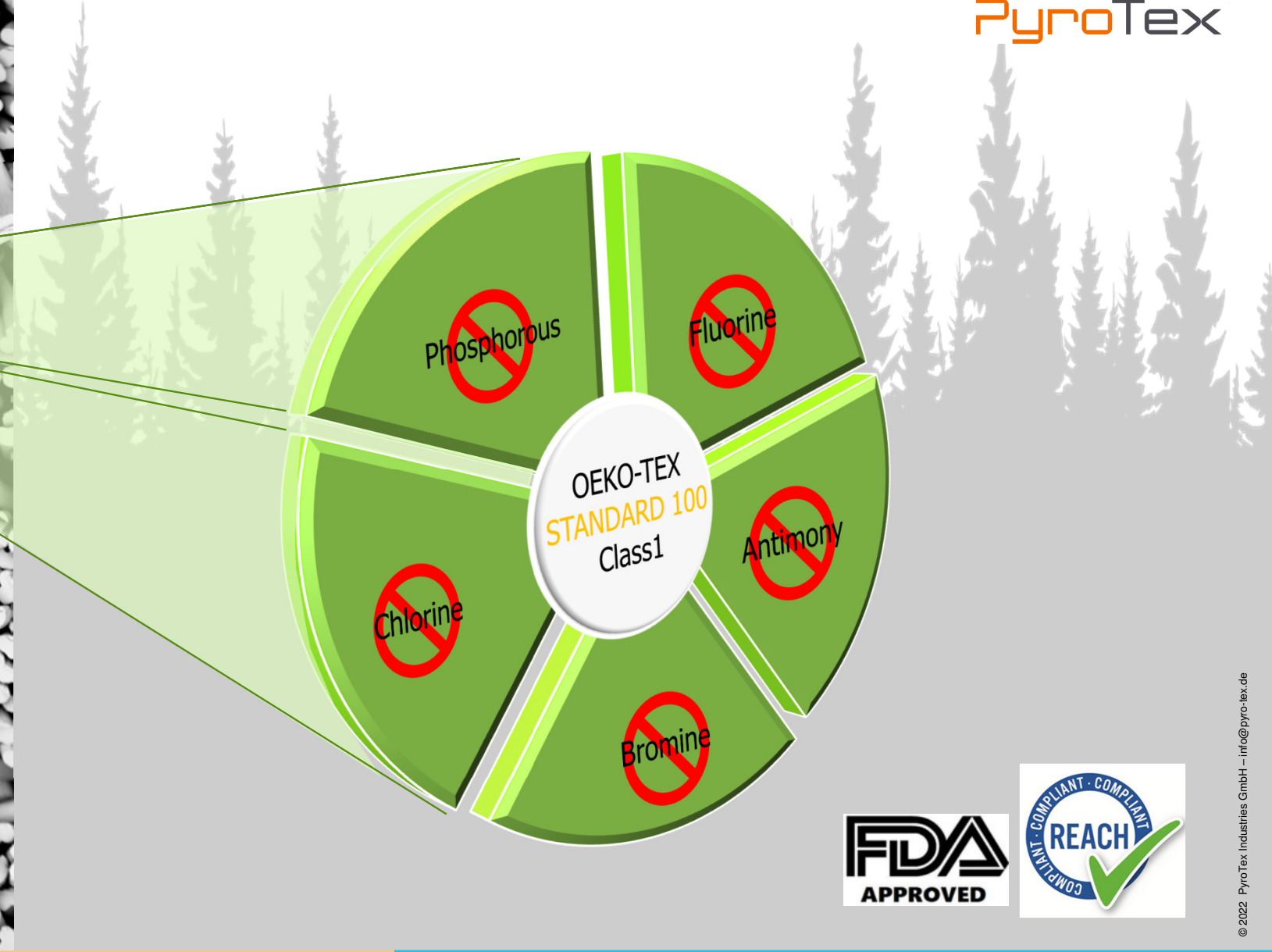
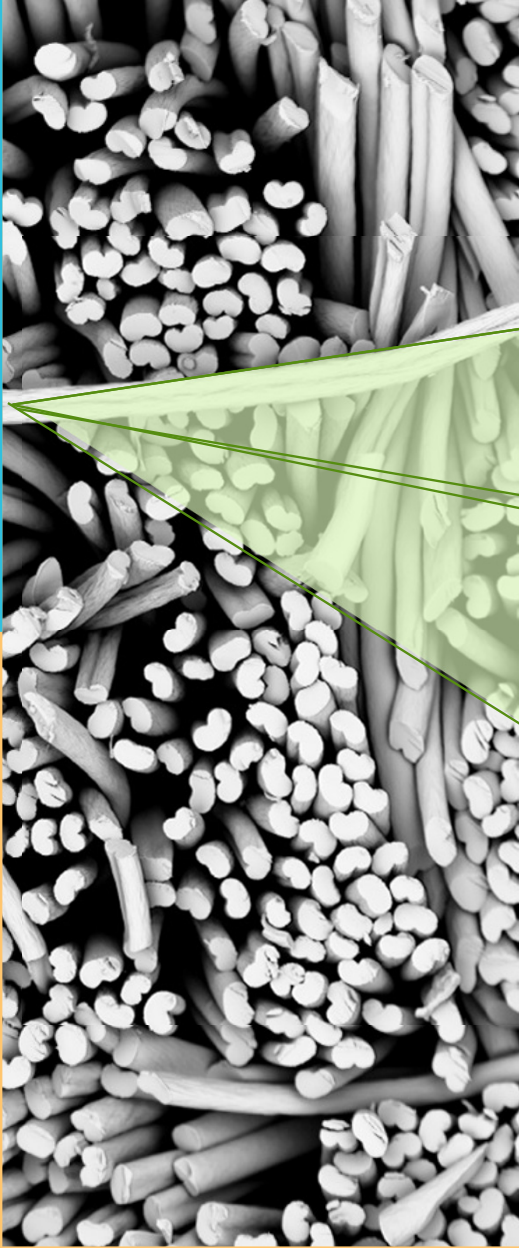


DARK BROWN



BLACK

Other colours can be matched
in both fiber and solution dyed



PyroTex



TECHNICAL DATA SHEET

Fineness	2.0/2.8/3.8dtex (1.9/2.5/3.5den)
Staple lengths	20-120mm
Limiting Oxygen Index (LOI)	43% [ISO 4589-2]
Thermal conductivity (k value) (ability to conduct heat)	0.030 W/mK [ISO 8301] (the lower the better the thermal protection)
Thermal Resistance (R value m²K/W) (ability to resist the flow of heat)	material thickness [m]/0.030 W/mK (the higher the better the heat resistance)
NBS Smoke density (opacity of smoke)	0 after 4min (does not smoke) [ASTM E662-97]
Shrinkage in boiling water	0%
Alkaline Resistance	very good
Acid Resistance	very good
UV Resistance	very good
Solvent Resistance	very good
Hydrolysis Resistance	very good
Melting point	does not melt
Afterglow	no
Continuous Heat Resistance	250°C (480°F)
Moisture Regain	12%
Water Imbibition	45%
Oeko-Tex Standard 100	Class I (baby products)
REACH	pass
FDA	approved [CFR 177.2600]
Density	1.5g/cm³
Dyeable	yes
Anti-Odor (Staph. Aureus, E. Coli)	permanent [ASTM E2149 13a]

PyroTex[®] is antimony, bromide and halogen free

PyroTex Industries GmbH – Lerchenstr. 28a – 22767 Hamburg - Germany

info@pyro-tex.de

PyroTex[®]
medic



Medical and Hygiene Applications

NO VIRUS

SARS-CoV-2 (Covid-19) = -99.57%
Feline Corona = -99.82%
H3N2 = -99.99%
MS2 = -99.50%

NO BACTERIA

Klebsiella Pneum.= -99%
MRSA = -99%
C. Diff = -97.55%
E. Coli = -97.7%

NO FUNGUS

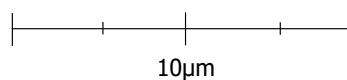
Aspergillus Niger –
resistant

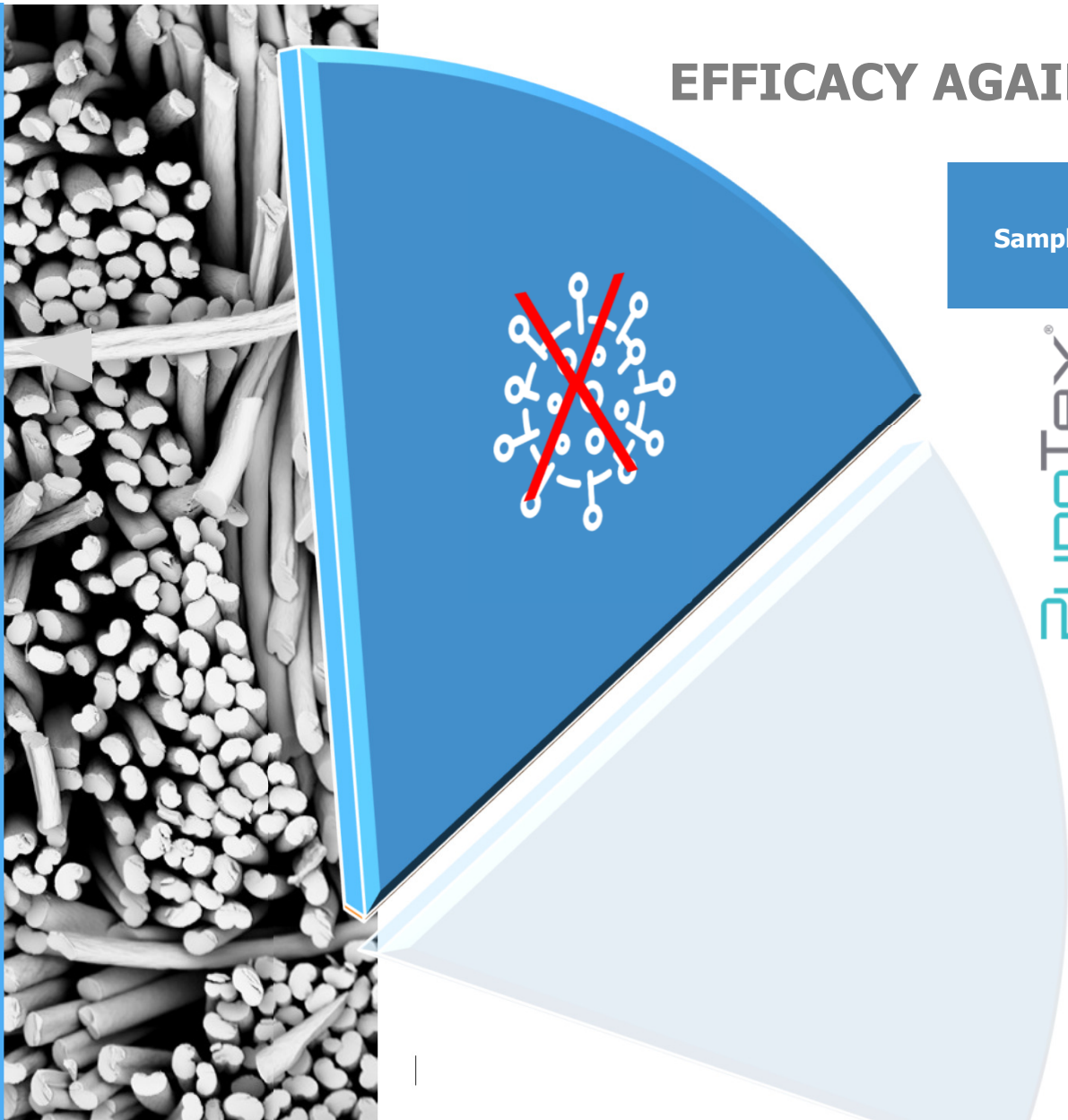
**FLAME
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**INHERENT
PERMANENT
PROPERTIES**

ANTI ODOR

HIGH COMFORT

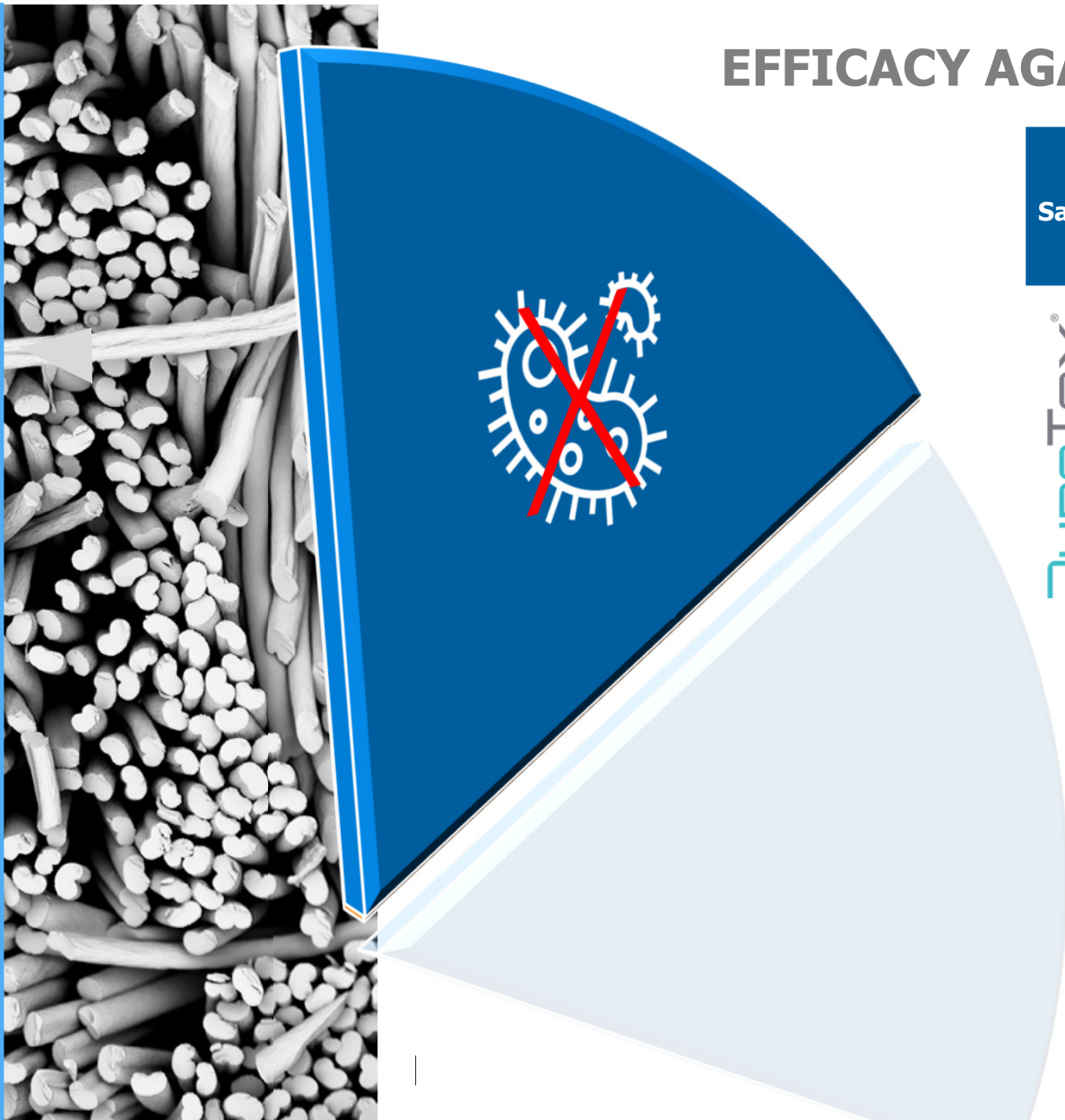




EFFICACY AGAINST **VIRUS**

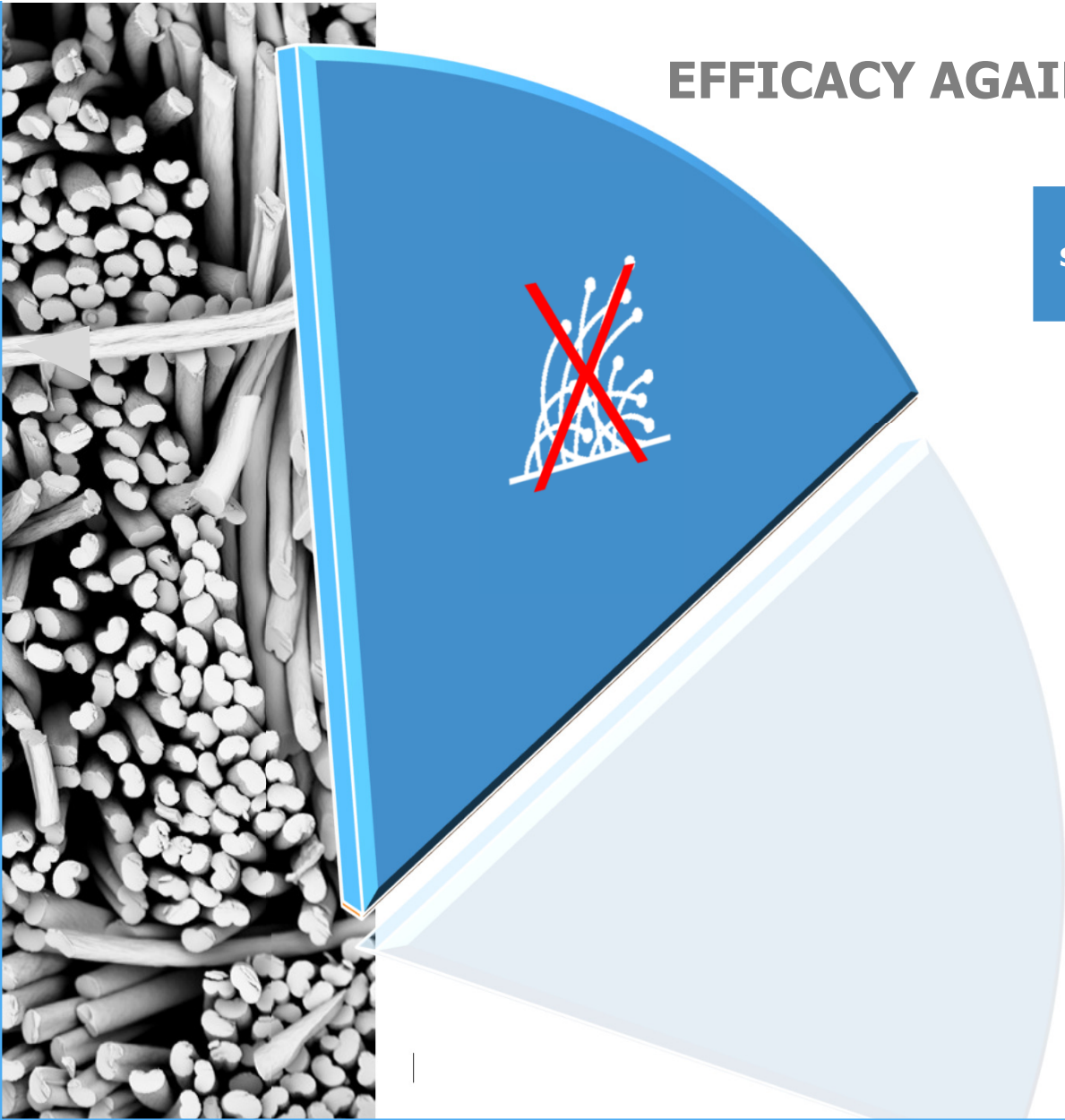
Sample	Test Organism	TDIC ₅₀	Percentage Reduction of Virus	Percentage Reduction of Virus
		at 0 hrs.	at 14sec	at 30min
	SARS-CoV-2	3.68x10 ⁵	99%	99.57%
		at 0 hrs.	at 2 hrs	at 24 hrs
	MS2 Bacteriophage	1.62x10 ⁵	93.82%	99.29%
		at 0 hrs.	at 2 hrs	Log reduction
	H3N2	1.9x10 ⁸	99.99%	4.34
		at 0 hrs.	at 2 hrs	Log reduction
	Feline Corona	1.8x10 ⁵	99.82%	2.75

PyroTex[®] medic



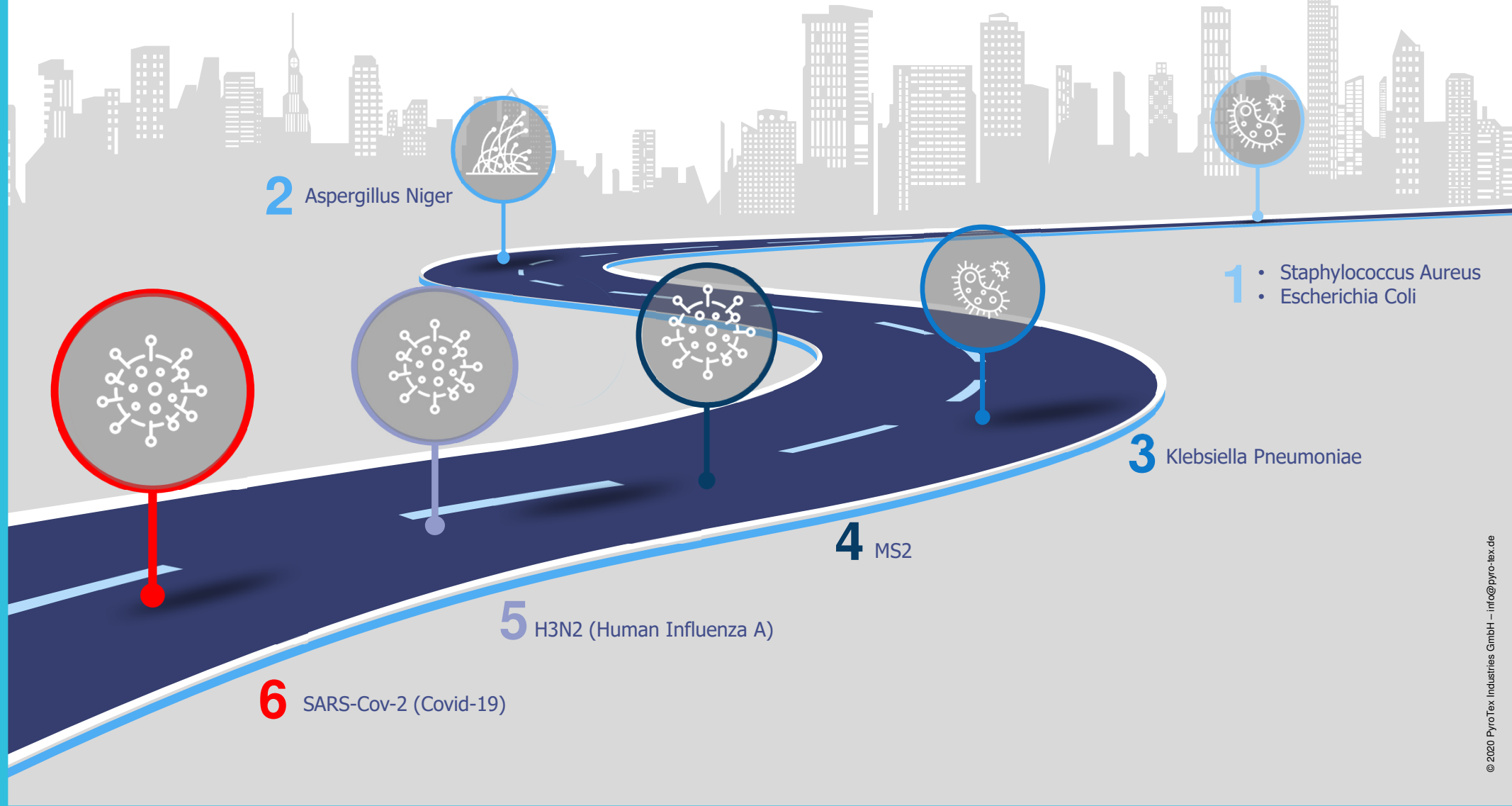
EFFICACY AGAINST **BACTERIA**

Sample	Test Organism	No. of Bacteria per sample (CFU/ml)	Percentage Reduction of Bacteria	Percentage Reduction of Bacteria
		at 0 hrs.	at 1h	at 24h
PyroTex [®] medic	Klebsiella Pneumniae	1.72 x 10 ⁵	n/a	98.97%
	Staph. Aureus	1.79 x 10 ⁵	93.74%	99.07%
	Esch. Coli	1.91 x 10 ⁵	89.89%	97.70%
	C. Diff.	8.60 x 10 ⁴		97.55%



EFFICACY AGAINST FUNGUS

Sample	Test Organism	Growth on Specimen/ Reduction	Interpretation
PyroTex [®] medic		at 24hrs	
	Candida Auris	98.71%	Resistant against this fungus
	Aspergillus Niger	0	Resistant against this Fungus





Medical

Products

- Scrubs
- Respirators
- Blankets
- Sheets
- Curtains

Why PyroTex® medic?

- Flame resistant
- Anti-Viral
- Anti-Microbial
- hydrophilic
- OekoTex Class I
- dyable



Hospitality

Products

- Mattress & Pillow covers
- Blankets
- Curtains
- Filtration

Why PyroTex® medic?

- Flame resistant
- Anti-Viral
- Anti-Microbial
- Fungi resistant
- OekoTex Class I
- dyable



Personal

Applications

- Masks
- Mattress & Pillow covers
- Gloves
- Blankets
- etc.

Why PyroTex® medic?

- Anti-Viral
- Anti-Microbial
- Fungi resistant
- Flame resistant
- Anti-Odor
- OekoTex Class I



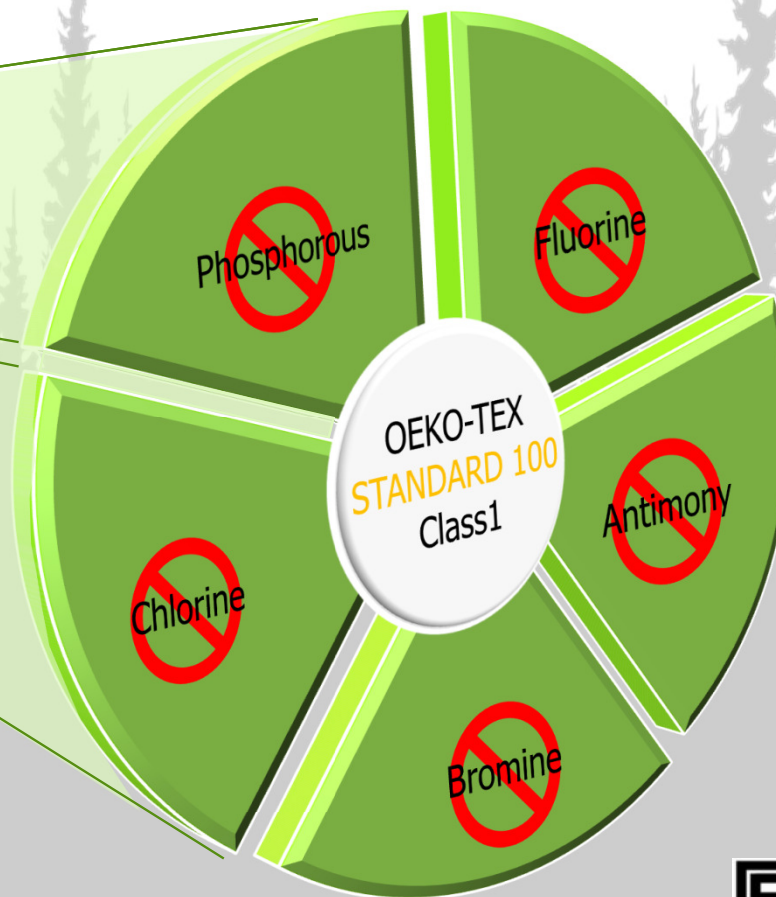
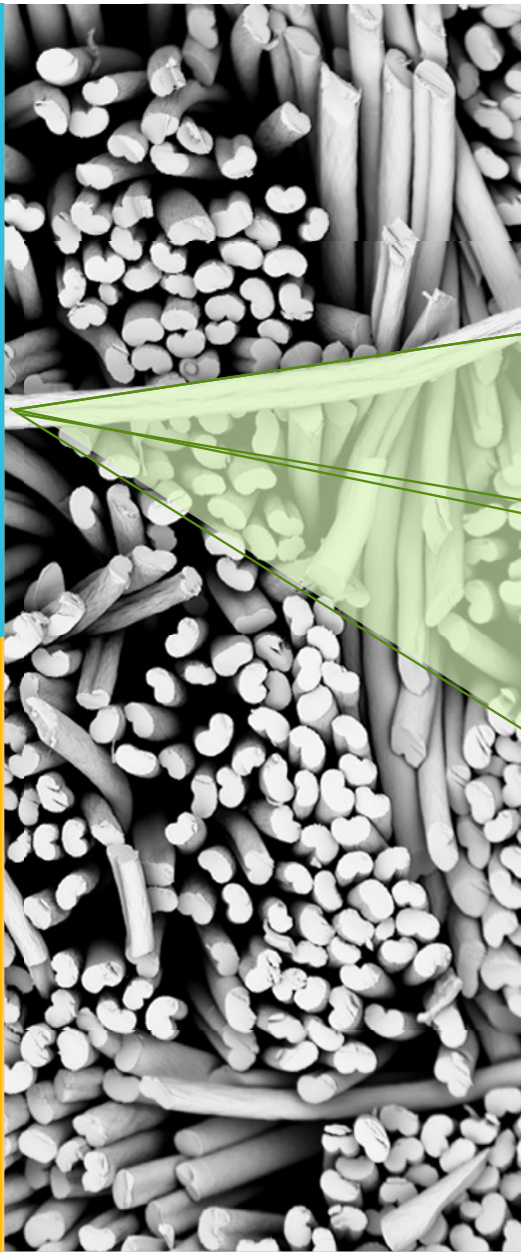
Institutional

Applications

- Masks
- Gloves
- Filtration

Why PyroTex® medic?

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- Anti-Microbial
- Anti-Odor
- Flame resistant
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classic

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Moisture Regain	12%
Water Imbibition	45%
Oeko-Tex Standard 100	Class I (baby products)
REACH	pass
FDA	approved [CFR 177.2600]
Density	1.5g/cm ³
Dyeable	yes
Anti-Odor (Staph. Aureus, E. Coli)	permanent [ASTM E2149 13a]

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medic

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Staple lengths	20-120mm
Virus Resistance (SARS-CoV-2=Covid-19, H3N2, MS2)	permanent [ISO 18184 / AATCC 100-2012]
Bacterial Resistance (Klebsiella Pneumoniae, Staph. Aureus, E. Coli)	permanent [ASTM E2149 13a / AATCC 100-2012]
Fungus Resistance (Aspergillus Niger)	permanent [AATCC 30, III 2017]
Oeko-Tex Standard 100 REACH	Class I (baby products) pass
Moisture Regain	12%
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