

## Protective clothing made of **NOMEX® Comfort**

Why ALWIT GmbH, since already 1968 manufacturer of **Personal Protective Equipments (PPE)** made of **NOMEX®** and probably the first company in Europe in this field, concentrates on **NOMEX® Comfort** (before: **NOMEX® Delta C**) ?

Really simple, because ALWIT has a lot of experience and knows that **NOMEX® Comfort** is the most perfect material of the **NOMEX®** family.

- **NOMEX® Comfort** has same blend of 5% para-aramide fibres **KEVLAR®** as **NOMEX® III**, a mixture that prevents or reduces the break-off of the material during flame exposure.
- **NOMEX® Comfort** is permanently antistatic without addition of stainless steel fibres, because antistatic is „build-in“. Du Ponts carbon fibre P 140 incorporated as core yarn in the soul of the threads provides a quick discharge by induction, sufficient to avoid spark discharge caused by static charge. This antistatic property can be tested according to EN 1149 part 3.
- **NOMEX® Comfort** consists of finest fibres, and therefore it has a soft texture and high comfort.
- **NOMEX® Comfort** may be also piece dyed - as **NOMEX® III**.

Compared to other types of same weight **NOMEX® Comfort** offers

- + better protection,
- + more comfort and
- + antistatic properties

Compared to other types of same protection **NOMEX® Comfort** offers

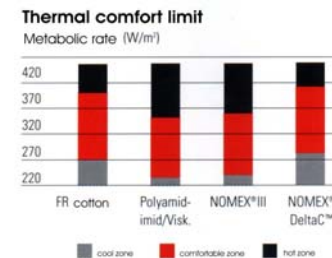
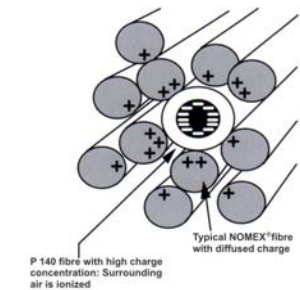
- + less weight
- + more comfort
- + lower price

The formula reads therefore:

$$\text{PPE from } \mathbf{NOMEX^{\circledR} \text{ Comfort}} \text{ is } \mathbf{SAFETY} \\ \mathbf{+ PROFITABILITY} \\ \mathbf{+ COMFORT} \\ \mathbf{= QUALITY}$$



## Antistatic



## Test for thermal protection (TPP-Test)

	t(2)	TPP	FFF
<b>NOMEX® Comfort</b> 220 g/m <sup>2</sup>	<b>7.6</b>	<b>15.2</b>	<b>6.9</b>
Cotton 320 g/m <sup>2</sup>	<b>4.5</b>	<b>9.0</b>	<b>2.8</b>

Material number	803.Z*	804.Z*	805.Z*
Tradename	<b>NOMEX® Comfort</b>		
Material description	meta-aramide fibre (NOMEX®) 93 % para-aramide fibre (KEVLAR®) 5 % carbon fibre, P 140 2 %		
FC-impregnation, soil-, oil- and water-repellent	optional		
Weight [g/m <sup>2</sup> ]	190	220	265
Colour fastness (fibre dyed)	5 (charge > 2000 m needed)		
Colour fastness (piece dyed)	4 (depending on colour)		
Lining (1)	optional		
Lining (2)	optional		
Lining-code XX	unlined = 00		
Application	convection, radiant heat, limited metal splashes		
Temperature range [°C]	<370° C (beginning of decomposition of the fibre)		
Packing unit	Depeneding of type of PPE		
Product packing	PE-bag, dark coloured		
Dispatch packing	cardboard box		
Storage	dustfree, protected from light		
Washing temperature [°C]	60° C		
Cleaning	A		
Waste removal	recycling, depending of contamination by use		

NOMEX® is a registered trademark of Du Pont.

Material number	803.Z*	804.Z*	805.Z*	
<b>General requirements</b>	<b>Standard</b>	<b>Level / Rate</b>		
6.4 Dimensional change [%]	ISO 5077	-0,9 / -3,0	-0,8 / -2,3	-1,9 / -1,7
<i>Antistatic</i>	<i>EN 1149-5/ EN 1149-3</i>	<i>&lt; 0,01</i>	<i>&lt; 0,01</i>	<i>&lt; 0,01</i>
<i>Half period of discharge</i>		<i>0,80</i>	<i>0,80</i>	<i>0,80</i>
<i>Shielding factor S</i>				
6.5 Tensile strength [N]	ISO 13934-1	1.212 / 855	1.213 / 843	1.550 / 930
length / cross				
6.5 Tear strength [N]	ISO 19937-2	47 / 42	44 / 48	74 / 85
length / cross				
6.9 Allergies		Hautunverträglichkeiten sind nicht bekannt		
6.9 pH-value		6,2	6,1	6,0
<b>Thermal requirements</b>	<b>Standard</b>	<b>Level / Rate</b>		
6.2 Heat resistance	ISO 17493	-0,7 / -0,7	-0,7 / -0,7	-0,7 / -0,7
Shrinkage length / cross		no	no	no
Melting, dripping		no	no	no
Igniting				
6.3 Burning behaviour	EN ISO 15025	<b>A1</b>	<b>A1</b>	<b>A1</b>
Afterburn [s]		0	0	0
Afterglow [s]		0	0	0
Hole formation		no	keine	no
Melting, dripping		no	nein	no
7.2 Convective heat [HTI <sub>24</sub> ]	ISO 9151	<b>B1</b> 4	<b>B1</b> 5	<b>B1</b> 5
7.3 Radiant heat [RHTI <sub>24</sub> ]	ISO 6942	<b>C1</b> 15	<b>C1</b> 16	<b>C1</b> 16
7.4 Molten metal (Al)	ISO 9185			
7.5 Molten metal (Fe)	ISO 9185			<b>E1</b> 66
7.6 Contact heat [T <sub>i</sub> ]	ISO 12127			<b>F1</b> 6
8 Marking	ISO 13688 / EN 340	EN ISO 11612  A1 B1 C1	EN ISO 11612  A1 B1 C1	EN ISO 11612  A1 B1 C1 E1 F1

The *italic* printed requirements are not part of EN ISO 11612.

**Z\* = colour code**  
(not each material is available in each colour)

1	2	3	4
6	7	8	9