



TECHNICAL DATASHEET

PRODUCT DESCRIPTION

AFCAT's Nitrile Coated Smooth Palm Gloves are crafted with a refined 13-gauge polyester knit shell. Engineered with a durable nitrile coating, they offer a secure grip and dependable protection against chemical exposures such as MDI.

MATERIAL COMPOSITION

Palm: Black Nitrile

Back: Grey Nylon/Spandex

Cuff: Grey and White Nylon/Spandex/Elastics

Cuff Binding: White Polyester Binding

DEXTERITY EN ISO 21420:2020

Whole Glove	Unit	Result
Smallest diameter of pin fulfilling test condition	mm	5.0
Smallest diameter of pin fulfilling test condition (2)	mm	5.0
Smallest diameter of pin fulfilling test condition (3)	mm	5.0
Smallest diameter of pin fulfilling test condition (4)	mm	5.0
Performance level	-	5

ABRASION RESISTANCE EN 388:2016 +A1:2018

Black(grey) nitrile(nylon/spandex) palm	Result
Deviation from the test method	No
Used consumables- Abrasive	Klingspor PL31B Grit 180
Used consumables- Adhesive	3M Scotch
Number of cycles at the hole detection	>8000
Number of cycles at the hole detection (2)	>8000
Number of cycles at the hole detection (3)	>8000
Number of cycles at the hole detection (4)	>8000
Performance level	4

CUT RESISTANCE EN 388:2016 +A1:2018

Black(grey) nitrile(nylon/spandex) palm	Result
Deviation from the test method	No
Used consumables- canvas	LEM 6
Used consumables- blade	OLFA RB45
Mean value of test piece 1	1.9
Mean value of test piece 2	1.9
Considered value	1.9
Performance level	1



**TECHNICAL DATASHEET****TEAR STRENGTH RESISTANCE: 2016 EN 388:2016 + A1:2018**

Black(grey) nitrile(nylon/spandex) palm	Unit	Result
Tear strength	N	>75
Tear strength (2)	N	>75
Tear strength (3)	N	69
Tear strength (4)	N	60
Performance level	-	3

PUNCTURE RESISTANCE:2016 EN 388:2016 + A1:2018

Black(grey) nitrile(nylon/spandex) palm	Unit	Result
Puncture resistance	N	39
Puncture resistance (2)	N	49
Puncture resistance (3)	N	47
Puncture resistance (4)	N	49
Performance level	-	1

PH-TEXTILE (KCI SOLUTION) ISO 3071:2020

Black(grey) nitrile(nylon/spandex) palm	Requirement	Result	Conformity
pH value	3.5< - <9.5	6.7	Pass

POLYCYCLIC AROMATIC HYDROCARBONS (8) ISO/TS 16190:2013

Black(grey) nitrile(nylon/spandex) palm	Requirement	Unit	Result	Conformity
Benzo(a)anthracene	<1	mg/kg	<0.1	Pass
Chrysene	<1	mg/kg	<0.1	
Benzo(b)fluoranthene	<1	mg/kg	<0.1	
Benzo(k)fluoranthene	<1	mg/kg	<0.1	
Benzo(a)pyrene	<1	mg/kg	<0.1	
Dibenzo(a,h)anthracene	<1	mg/kg	<0.1	
Benzo(e)pyrene	<1	mg/kg	<0.1	
Benzo(j)fluoranthene	<1	mg/kg	<0.1	

XRF SCREENING ASTM F2617-15

Black(grey) nitrile(nylon/spandex) palm	Requirement	Unit	Result	Conformity
Cd (Cadmium)	<100	ppm	<100	Pass

XRF SCREENING (TIN) ASTM F2617-15

Black(grey) nitrile(nylon/spandex) palm	Requirement	Unit	Result	Conformity
Sn (Tin)	<150	ppm	<150	Pass



**TECHNICAL DATASHEET****PHthalATES CEN ISO TS 16181: 2011**

Black(grey) nitrile(nylon/spandex) palm	Requirement	Unit	Result	Conformity
BBP . Butyl benzyl phthalate	<0.1	%	<0.0025	Pass
DBP . Di-butyl phthalate	<0.1	%	<0.0025	
DEHP . Di-(2-ethylhexyl) phthalate	<0.1	%	<0.0025	
DIBP . Di-iso-butyl phthalate	<0.1	%	<0.0025	

PH – TEXTILE (KCI SOLUTION) ISO 3071:2020

Grey nylon/spandex back	Requirement	Result	Conformity
pH value	3.5< - <9.5	6.7	Pass

AROMATIC AMINES DERIVED FROM AZO COLORANTS ISO 14362-1:2017 (combined extraction)

Grey nylon/spandex back	Requirement	Unit	Result	Conformity
Accessible with fibre extraction	<30	mg/kg	<5	Pass
Accessible without fibre extraction	<30	mg/kg	<5	

PH – TEXTILE (KCI SOLUTION) ISO 3071:2020

Cuff	Requirement	Result	Conformity
pH value	3.5< - <9.5	6.7	Pass

AROMATIC AMINES DERIVED FROM AZO COLORANTS ISO 14362-1:2017 (combined extraction)

Cuff	Requirement	Unit	Result	Conformity
Accessible with fibre extraction	<30	mg/kg	<5	Pass
Accessible without fibre extraction	<30	mg/kg	<5	

PH – TEXTILE (KCI SOLUTION) ISO 3071:2020

White polyester binding	Requirement	Result	Conformity
pH value	3.5< - <9.5	6.4	Pass

AROMATIC AMINES DERIVED FROM AZO COLORANTS ISO 14362-1:2017 (with extraction)

White polyester binding	Requirement	Unit	Result	Conformity
Accessible with fibre extraction	<30	mg/kg	<5	Pass



**AFCAT**

AFCAT Nitrile Smooth Gloves AFS-1113

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END OF TEST REPORT

(+) CNAS accreditation

▲: The test was carried out by external accredited laboratory under their accreditation scope. Unless otherwise specified, the physical test items in this report performed in CTC Shanghai lab were conditioned and tested in the environment of T 23±2°C / RH 50±4%.

TABLE OF PERFORMANCE LEVEL FOR GLOVES

Test Item	Performance Level					
	0##	1	2	3	4	5
Abrasion Resistance (EN 388) Number of cycles (minimum)	<100	100	500	2000	8000	-
Blade Cut Resistance (EN 388) Index (I) (minimum)	<1.2	1.2	2.5	5.0	10.0	20.0
Tear Resistance (EN 388) Force (N) (minimum)	<10	10	25	50	75	-
Puncture Resistance (EN 388) Force (N) (minimum)	<20	20	60	100	150	-
Finger Dexterity (EN ISO 21420) Smallest diameter of pin fulfilling test conditions (mm)	-	11.0	9.5	8.0	6.5	5.0

Performance level 0 means the glove falls below the minimum performance level for the given individual hazard

