



Finnish Institute of
Occupational Health

FIOH

notified by the Ministry of Social Affairs and Health
and identified under 0403 grants

EC TYPE EXAMINATION CERTIFICATE

17041KMS01rev1

for high visibility clothing against cold
as defined in EN ISO 20471:2013,
jacket and overall class 3, trousers class 1,
and EN 342:2004

jacket 30716 with trousers 30718 I_{cler} 0.326 m²K/W (B),
overall 30717 I_{cler} 0.321 m²K/W (B),
air permeability class 3

**Kya Winter Jacket art. 30716 6, 30716 5,
Kya Winter Overall art. 30717 6, 30717 5,
Kya Winter Trousers art. 30718 6, 30718 5**

Synfiber AS
Oslo, Norway

These products comply with Directive 89/686/EEC,
as amended

Helsinki, 24 August 2017
Expiry date: 23 August 2022

Erja Tammela
Senior Specialist

Minna Torenien
Specialist



1. Applicant

Synfiber AS
Professor Birkelandsvei 35
N-1081 Oslo
Norway

2. Description and identification of the product

Type: High visibility clothing against cold as defined in EN ISO 20471:2013 and EN 342:2004

EN ISO 20471:

Jacket and overall class 3, trousers class 1 for minimum areas of visible materials

EN 342:

Thermal insulation value of jacket 30716 with trousers 30718 I_{cler} 0.326 m²K/W (B), thermal insulation value of overall 30717 I_{cler} 0.321 m²K/W (B), air permeability class 3

Name: Kya Winter Jacket art. 30716 6, 30716 5, Kya Winter Overall art. 30717 6, 30717 5, Kya Winter Trousers art. 30718 6, 30718 5

Size range: Jacket, Overall: S ->; Trousers: XS ->

Description: Garments are partly made of a fluorescent yellow or orange woven ripstop fabric with laminated PU membrane, 150D, 100% PES, 180 g/m² (Zhejiang Huaxing Garments Co. Ltd., China). Non-fluorescent material is the same quality in black.

Garments are lined with 100% PES padding and 210T, 100% PES, inner lining. Padding on the jacket and overall body is 140 g/m² and in sleeves and legs 120 g/m². Padding in the trousers is 100 g/m².

Retroreflective material is LOXY® 9201 Silver (Sto-Nor Industri AS, Norway).

Manufacturer: Zhejiang Huaxing Garments Co. Ltd., China

Pictures of the products are on page 3.

3. Adequacy and validity of the technical documentation

The documentation supplied by the applicant is listed in Appendix 1. The technical documentation is considered adequate and valid. Materials and the products have been tested in accordance with harmonized European standards EN ISO 20471:2013 and EN 342:2004 by accredited testing laboratories. The models of the products supplied by the applicant conform to the technical documentation.

4. Compliance with basic health and safety requirements

The products and the technical documentation relating to them comply with the relevant basic health and safety requirements stated in Directive 89/686/EEC Annex II as amended.



Note: Any modification in design, materials, or in the technical documentation, carried out on these type examined products must be brought to the attention of FIOH.

Pictures of the products

Kya Winter Jacket art. 30716 6



Kya Winter Jacket art. 30716 5



Kya Winter Overall art. 30717 6



Kya Winter Overall art. 30717 5



Kya Winter Trousers art. 30718 6



Kya Winter Trousers art. 30718 5



Appendix 1. Technical documentation

End of EC type examination certificate 17041KMS01rev1.



Technical documentation regarding EC type examination certificate 17041KMS01rev1

Product name: Kya Winter Jacket art. 30716 6, 30716 5, Kya Winter Overall art. 30717 6, 30717 5,
Kya Winter Trousers art. 30718 6, 30718 5

Applicant: Synfiber AS, Professor Birkelandsvei 35, N-1081 Oslo, Norway

Item of technical documentation	Document identification	Assessment
1. Application for the EC type examination	2017-01-03 Update request, e-mail 2017-08-09	
2. Product drawing, construction, and material list	Sketches of the products Measurement tables, 2017-01-17 Data sheets	Products are identified and materials are specified
3. Compliance with Directive 89/686/EEC relevant basic requirements	The compliance assessment is based on reports mentioned below items 3.1-3.8	
3.1 FIOH assessment of relevant Directive basic requirements	2017-08-24	The applied harmonised standards EN ISO 13688:2013, EN ISO 20471:2013 and EN 342:2004 support the relevant requirements
3.2 SGS test reports	HZSL1503017801TX, 2015-04-21 HZSL1506047771TX, 2015-07-04 100% PES ripstop, HV Yellow HZSL1503017798TX, 2015-04-20 HZSL1506048482TX, 2015-07-03 100% PES ripstop, HV Orange HZSL1505030343TX, 2015-05-22 100% PES ripstop, HV Yellow, HV Orange	Fluorescent material and colours meet the requirements of EN ISO 20471:2013 (5 washes at 60°C)
3.3 SGS test report	HZSL1503017789TX, 2015-04-07 100% PES ripstop, Black	Non-fluorescent colour meets the requirements of EN ISO 20471:2013
3.4 FIOH test report	No. 336140T02, 2016-11-04 LOXY 9201	Retroreflective material meets the requirements of EN ISO 20471:2013 (70 washes at 60°C)
3.5 FIOH test report	No. 353283T01, 2017-03-03 Kya Winter Jacket art. 30716 with Kya Winter Trousers art. 30718, Kya Winter Overall art. 30717	Garment ensembles meet the requirements of EN 342:2004. Jacket 30716 with trousers 30718, thermal insulation I_{cler} 0.326 m ² K/W (B). Overall 30717, thermal insulation I_{cler} 0.321 m ² K/W (B). Air permeability class 3 for laminated fabric.
3.6 FIOH test record	Assessment of the design and measurements of areas, 2016-04-06 and 2017-08-24	Jacket and overall meet the requirements of class 3, trousers of class 1 as defined in EN ISO 20471:2013 for areas of visible materials. Areas of visible materials: <ul style="list-style-type: none">• Jacket 30716, size S: reflex 0.20 m², fluorescent 0.81 m²• Overall 30717, size S: reflex 0.30 m², fluorescent 0.85 m²• Trousers 30718, size XS: reflex 0.10 m², fluorescent 0.24 m²• Trousers 30718, size S: reflex 0.11 m², fluorescent 0.36 m²



3.7 Draft information sheet	EN 20471 High Visibility EN 342 Protection Against Cold, Synfiber Workwear	Documents meets the requirements of Directive 89/686/EEC, EN ISO 13688:2013, EN ISO 20471:2013 and EN 342:2004
3.8 Product markings	Drafts for labels, 2017-03-02	Markings meet the requirements of EN ISO 13688:2013, EN ISO 20471:2013 and EN 342:2004
4. Description of the production quality system and related product control and test facilities	BSCI Audit Summary Report, Audit id: 45595, 2016-03-23 Lin'an Shengfeng Garment Co., Ltd.	Adequate to category II products