



Finnish Institute of
Occupational Health

FIOH

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

EC TYPE EXAMINATION CERTIFICATE

14316CHS01rev1

for high visibility clothing
as defined in EN ISO 20471:2013
class 2, as an assembly class 3

Carpenter Trousers

Hi vis orange art. 23412 5 44-62,

Hi vis yellow art. 23412 6 44-62

Tool Vest

Hi vis orange art. 23712 5 01-07,

Hi vis yellow art. 23712 6 01-07

Synfiber AS
Oslo, Norway

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

Helsinki, 26 January 2015
Expiry date: 25 January 2020

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This certificate comprises 3 pages and an appendix.
This certificate replaces certificate 14316CHS01, 2014-09-08

Finnish Institute of Occupational Health, Notified Body No. 0403,
Topeliuksenkatu 41 b, FI-00250 Helsinki, Finland



1. Applicant

Synfiber AS
Professor Birkelands vei 35
N-1081 Oslo
Norway

2. Description and identification of the product

Type: High visibility clothing as defined in EN ISO 20471:2013
Class 2, as an assembly class 3 for minimum areas of visible materials

Name: Carpenter Trousers, Hi vis orange art. 23412 5 44-62, Hi vis yellow art. 23412 6 44-62
Tool Vest, Hi vis orange art. 23712 5 01-07, Hi vis yellow art. 23712 6 01-07

Size range: Trousers 44 ->, Vest S->

Description: Main fabric of garments is a fluorescent yellow or orange quality WORKCODE® 71, 85% PES/15% CO, 295 g/m² (IBS International Co. Ltd., Korea).

Non-fluorescent parts of trousers can be made of woven fabric 65% PES/35% CO, 310 g/m² (Mianyang Jialian Printing & Dyeing Co. Ltd., China), reinforcement material either black cordura 500D AC coating, 100% PA, 213 g/m² (Changshu Huamao Textile Co. Ltd., China) or 500D cordura (Zhejiang Huaxing Garments Co. Ltd, China).

Non-fluorescent parts of vest are made of black 100% PES mesh fabric, 100% ribbing and webbing, inside hanging pockets black cordura AC coating, 100% PA, 205 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 a harmonized European standard EN ISO 20471:2013 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

Carpenter Trousers art. 23412

Hi vis orange art. 23412 5 44-62



Tool Vest art. 23712

Hi vis orange art. 23712 5 01-07



Hi vis yellow art. 23412 6 44-62



Hi vis yellow art. 23712 6 01-07



Appendix 1. Technical documentation

End of EC type examination certificate 14316CHS01rev1.



Technical documentation regarding EC type examination certificate 14316CHS01 rev1

Product name: Carpenter Trousers, Hi vis orange art. 23412 5 44-62,
Hi vis yellow art. 23412 6 44-62
Tool Vest, Hi vis orange art. 23712 5 01-07, Hi vis yellow art. 23712 6 01-07

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

<i>Item of technical documentation</i>	<i>Document identification</i>	<i>Assessment</i>
1. Application for the EC type examination	2014-09-03	
2. Product drawing, construction, and material list	Drawings of the products: <ul style="list-style-type: none">Hi-vis tool vest 23712, 2014-08-13Carpenter ¾ trousers 23412, 2014-08-07 Material list Hi-vis tool vest, 2014-08-13 Material list for Carpenter trousers	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 3.1-3.11	
3.1 FIOH assessment of relevant Directive basic requirements	2015-01-26	The applied harmonised standards EN ISO 13688:2013 and EN ISO 20471:2013 support the relevant requirements
3.2 Centexbel test report	CR/2603_2013, 2013-10-21 WORKCODE® 71, HV Yellow CR/2602_2013, 2013-10-21 WORKCODE® 71, HV Orange	Fluorescent material and colours meet the requirements of EN ISO 20471:2013
3.3 Testex Oeko-Tex Certificate	No. SEWO 096081, 2014-06-12 IBS International Co. Ltd Fabrics made in PES and PES blends	Material meets the innocuousness requirements of EN ISO 13688:2013
3.4 SGS test report	HZSL1310069653TX, 2013-10-17 Knitted mesh fabric, black HZSL1407056484TX, 2014-08-11 Black mesh, binding and ribbon	Non-fluorescent materials meet the requirements of EN ISO 20471:2013
3.5 SGS test report	HZSL1407057202TX, 2014-08-14 100% Nylon fake cordura, black	Non-fluorescent material meets the requirements of EN ISO 20471:2013
3.6 SGS test report	HZSL1407060234TX, 2014-08-12 100% Nylon cordura, black	Non-fluorescent material meets the requirements of EN ISO 20471:2013
3.7 SGS test report	HZSL1412103988TX, 2015-01-12 65% PES/35% CO, black	Non-fluorescent material meets the requirements of EN ISO 20471:2013
3.8 Satra test report	SPC0219613/1345, 2014-01-17 LOXY 9201	Retroreflective material meets the requirements of EN ISO 20471:2013
3.9 FIOH test record	Assessment of the design and measurements of areas, 2014-09-28	Vest in size S and trousers in size 44 meet the minimum area requirements of class 2 and as an assembly class 3 as defined in EN ISO 20471:2013
3.10 Draft information sheet	EN 20471 High Visibility, Synfiber Workwear	Document meets the requirements of Directive 89/686/EEC, EN ISO 13688:2013 and EN ISO 20471:2013
3.11 Product markings	Drafts of markings	Markings meet the requirements of EN ISO 13688:2013 and EN ISO 20471:2013



4. Description of the production quality system and related product control and test facilities	Quality Management System Certificate No. UK13Q10012R2M, 06/07/2013, Zhejiang Huaxing Garments Co. Ltd, 2013	Adequate to category II products
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