



Finnish Institute of
Occupational Health

FIOH

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

EC TYPE EXAMINATION CERTIFICATE

14481JVS01rev1

for high visibility clothing
as defined in EN ISO 20471:2013,
class 2 for minimum areas of visible materials

T-Shirt

Art. 17928 6 Yellow/black,

Art. 17928 5 Orange/black

Synfiber AS

Oslo, Norway

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

Helsinki, 17 August 2015
Expiry date: 16 August 2020

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This certificate comprises 3 pages and an appendix.
This certificate replaces certificate 14481JVS01, 2015-01-05

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



1. Applicant

Synfiber AS
Professor Birkelandsvei 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 for minimum areas of visible materials

Name: T-Shirt Art. 17928 6 Yellow/black, Art. 17928 5 Orange/black

Size range: S ->

Description: T-shirt is made of a fluorescent yellow or orange knitted fabric, 100% PES, Bird's eye, 135 g/m² (John Stit Co. Ltd. / Grandeur Fiber Co., Ltd., Thailand).

Non-fluorescent parts are made of black mesh fabric, 100% PES, 115 g/m² and black rib fabric, 100% PES, 220 g/m² in black.

Retroreflective material is LOXY® 9901 Silver or 17501 Silver (Sto-Nor Industri AS, Norway).

Manufacturer: Sonny Tex Co. Ltd, Thailand

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 product 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

T-Shirt Art. 17928 6 Yellow/black



T-Shirt Art. 17928 5 Orange/black



Appendix 1. Technical documentation

End of EC type examination certificate 14481JVS01rev1.



Technical documentation regarding EC type examination certificate 14481JVS01rev1

Product name: T-Shirt Art. 17928 6 Yellow/black, Art. 17928 5 Orange/black

Applicant: Synfiber AS, Professor Birkelandsvei 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 | 2014-12-01 E-mail, 2015-08-12 | |
| 2. Product drawing, construction, and material list | Sketches of the products, 2014-12-10 Measurements, 2014-11-26 | 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 3.1-3.7 | |
| 3.1 FIOH assessment of relevant Directive basic requirements | 2015-08-17 | The applied harmonised standards EN ISO 13688:2013 and EN ISO 20471:2013 support the relevant requirements |
| 3.2 BTTG test report | Ref: 11/19881/A, 2014-09-10 100% PES Tricot, HV Yellow Ref: 11/20430/B1, 2015-03-20 100% PES Tricot, HV Orange | Fluorescent materials meet the requirements of EN ISO 20471:2013 (5 wash cycles at 60°C) |
| 3.3 SGS test report | No. 2829107, 2014-11-05 100% micropolyester, Yellow Mesh fabric in black Rib fabric in black | Non-fluorescent materials meet the requirements of EN ISO 20471:2013 |
| 3.4 Satra test report | SPC0218279/1338/1, Issue 2, 2013-11-06 LOXY 9901 SPC0220994/1401, 2014-01-15 LOXY 17501 | Retroreflective materials meet the requirements of EN ISO 20471:2013 |
| 3.5 FIOH test record | Assessment of the design and measurements of areas, 2014-12-05 | Shirt in size S meets the minimum area requirements of class 2 as defined in EN ISO 20471:2013. Area of reflective material 0.13 m ² , area of fluorescent material 0.63 m ² |
| 3.6 Draft information sheet | EN 471/20471 High Visibility, Synfiber Workwear | Document meets the requirements of Directive 89/686/EEC, EN ISO 13688:2013 and EN ISO 20471:2013 |
| 3.7 Product markings | Drafts for labels | 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 | Product quality control pointers, Synfiber Workwear | Adequate to category II products |