



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAF00000A2**  
Revision No:  
**3**

## This is to certify:

**That the Protective Clothing**

with type designation(s)  
**AlphaTec® LIGHT type TR**

Issued to

**Ansell Protective Solutions AB**  
**Malmö, Sweden**

is found to comply with

**DNV GL rules for classification – Ships**  
**DNV GL offshore standards**  
**DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations**

## Application :

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

Issued at **Hamburg** on **2021-05-28**

for **DNV**

This Certificate is valid until **2026-05-27**.

DNV local station: **Gothenburg FIS**

Approval Engineer: **Michael Oberländer**

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**Jörg Kallies**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

The AlphaTec® LIGHT type TR is classed as a non-encapsulating, type 1b gas-tight chemical protective suit with a breathable air supply worn outside the suit.

To be used with a self-contained breathing apparatus (complying with ISO 23269-3:2011) and AlphaTec® Mini Hood or SCBA cover, alternatively permanently attached Dräger Panorama Nova EPDM or Interspiro Spiromatic positive pressure, full face mask according to EN 136.

The suit material is of flexible polyester fabric coated on each side with PVC. Standard colour is orange. Available sizes XXS – XXXL.

Footwear: Integral socks in the suit material with separate outer Dunlop Acifort PVC boots or alternatively boots of an approved type (EN 20345) may be used.

Zipper: Rear-entry Dynat gas-tight PVC coated zipper, 805 mm long with splashguard

Gloves: AlphaTec® Scorpio 08-354 neoprene gloves attached with AlphaTec® Bayonet ring system.

The suit has one AlphaTec® Exhaust valve on the chest.

The product is manufactured by Ansell Protective Solutions Lithuania, UAB, Pramones 5K, LT-72328 Tauragė, Lithuania.

## Application/Limitation

As required by SOLAS 1974 as amended, Ch. II-2 Reg.19.3.6.1 and IMO IBC Code, Ch.14.1.

Achieved performance levels of the protective clothing material - EN 943-1 :2002

Abrasion resistance (EN530)	Class 6
Flex cracking resistance (EN ISO 7854 Method B)	Class 6
Trapezoidal tear resistance (EN ISO 9073-4)	Class 4
Tensile strength (EN ISO 13934-1)	Class 6
Puncture resistance (EN 863)	Class 3
Resistance to flame (EN 13274-4:2001)	Class 2
Seam strength (EN 13935-2)	Class 6
Closure/zipper strength (EN ISO 13935-2)	Class 6

Achieved performance levels for resistance to permeation by chemicals - EN 943-1 2002:

Sodium hydroxide, 40%	Class 6
Hydrochloric acid, 37%	Class 6
Formaldehyde solution	Class 6
Sulphuric acid 50%	Class 6

The applicant's instructions for use, storage, transport, maintenance and the applicant's recommendations and restrictions for use are to be complied with.

## Type Approval documentation

Test reports:

FORCE Technology:

108-32677.05b	dated 2009-02-23
113-27778	dated 2013-08-01
116-24375-01a	dated 2016-04-15
117-20950.16	dated 2017-12-07
118-21047.05d	dated 2018-07-02
118-21047.06e	dated 2018-07-06
118-21047.10	dated 2018-07-12
119-22272.02	dated 2019-03-20
119-22272.05b	dated 2019-05-06

BTTG:

60/01755/A dated 2018-01-16 and 60/01755/B dated 2018—01-23

DEKRA:

9260/17 dated 2017-10-12

ProQuares

Ref. No. 34862-33723	dated 2016-01-28
Ref. No. 48728-54100	dated 2017-11-08
Ref. No. 60652-58242	dated 2018-04-03
Ref. No. 60627-58355	dated 2018-04-03
Ref. No. 69684-68546	dated 2019-04-04



Job Id: **262.1-022541-3**  
Certificate No: **TAF00000A2**  
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EU Type examination certificate (PPE Directive) 0200-PPE-06312 Version 1 dated 2019-04-24 issued by Force Certification

EC Type examination certificate (PPE Directive) CE-1775-23/12 dated 2012-08-06 issued by CTCP

Drawing: 363039-333 AlphaTec suit model TR measurement issued by Ansell

Technical Data Specification AlphaTec Light type TR

User manual: AlphaTec® LIGHT type TR

This certificate is replacing the previously issued type approval certificate TAF00000A2.

### **Tests carried out**

EN 943-1:2015 + A1:2019

### **Marking of product**

The markings are to be in accordance with EN 943-1:2015 Para 7.

The product or its packing shall as a minimum be marked with the company's name, trade mark and the same type designations as given in the TA certificate for traceability. The marking shall be permanent and unique.

### **Periodical assessment**

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.