

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Thermal protective aids**

with type designation(s)

Ascotherm IMO 86 Thermal Protective Aids MK I, MK II and MK IV

Issued to

Hansen Protection AS
MOSS, Norway

is found to comply with

SOLAS 74 as amended, Regulation III/4, III/22, III/32, III/34 & X/3, LSA Code and 2000 HSC Code 8.**Application :****Approved for use as a Thermal protective aids.****This certificate is recognized by Transport Canada.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2017-06-21**This Certificate is valid until **2022-06-20**.for **DNV GL**DNV GL local station: **Sandefjord**Approval Engineer: **Tessa Bieber**

Mårten Schei-Nilsson
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.



Product description

"Ascotherm IMO 86 Thermal Protective Aids MK I, MK II and MK IV"

is a thermal protective aid made of aluminized polyester, 84 gram/m², with PE coating, packed in a sealed polyethylene bag.

The thermal protective aid comes in two different versions:

- type MK I is a bag with hood and zipper
- type MK II is fitted with arms
- type MK IV is fitted with arms, retro-reflective tape and reinforcements in seams

The products are manufactured at LTP-Furniture, Kedainiu, Lithuania.

Application/Limitation

- The TPA shall be used in conjunction with an approved lifejacket.
- The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. MSC.207(81) and Canadian Lifesaving Appliance Standard TP 14475E Ch.2.5; C.R.C., ch.1436, 114, 115, 117, 121 and Schedule XIII.
- Production testing shall be carried out according to IMO Res. MSC.81(70), part 2 as amended.
- Every thermal protection aid for use with Transport Canada approval shall be supplied with instructions, in English and French, and diagram explaining how to put on and use the aid. The instructions shall also be available in a format that can be inserted in the ship's training manual.

Type Approval documentation

Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC 81(70) part 1, including IMO Res. MSC.226(82) and IMO Res. MSC.323(89).

Tested to the requirements given in the Canadian Lifesaving Appliance Standard TP 14475E Ch.3.1.3 "Testing requirements for Thermal protective aids".

Marking of product

The product is to be indelibly marked with name of manufacturer, type designation, dimensions and date of manufacture. Further, that it is to be used in conjunction with a lifejacket. The marking shall comply with the LSA Code (IMO Res. MSC 48(66)), item 1.2.2.9.

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

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.