



MARINE DIVISION

Certificate number: 18956/B0 BV

File number: ACI 1000/499/003

Product code: 5210H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**SAINT-GOBAIN ISOVER G+H AG**

Ludwigshafen - GERMANY

*for the type of product*

**NON-COMBUSTIBLE MATERIALS**

ISOVER Marine ULTIMATE non-combustible products

**Requirements:**

BV Rules Part C Chapter 4 - SOLAS 74, as amended, Chapter II.2

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 14 Sep 2017****For BUREAU VERITAS,**

At BV HAMBURG, on 14 Sep 2012,

Udo Storm



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## **THE SCHEDULE OF APPROVAL**

### **1. PRODUCT DESCRIPTION:**

#### **ISOVER Marine Felt ULTIMATE U MFA 13-24**

Non-combustible glass wool felt covered with aluminium foil.  
Nominal density : 13 to 24 kg/m<sup>3</sup>

#### **ISOVER Marine Felt ULTIMATE U MFG 20-220 to 36-220**

Non-combustible glass wool felt covered with a glass cloth (weight per unit area 220 g/m<sup>2</sup>).  
Nominal density : 20 to 36 kg/m<sup>3</sup>

#### **ISOVER Marine Felt ULTIMATE U MFG 22-420**

Non-combustible glass wool felt covered with a glass cloth (weight per unit area 420 g/m<sup>2</sup>).  
Nominal density : 22 kg/m<sup>3</sup>

#### **ISOVER Marine Felt ULTIMATE U MFN 13-36**

Non-combustible glass wool felt .  
Nominal density : 13 to 36 kg/m<sup>3</sup>

#### **ISOVER Marine Felt ULTIMATE U MFV 13-36**

Non-combustible glass wool felt covered with a glass cloth (weight per unit area 60 g/m<sup>2</sup>).  
Nominal density : 13 to 36 kg/m<sup>3</sup>

#### **ISOVER Marine Felt ULTIMATE U MFX 36**

Non-combustible glass wool felt .  
Nominal density : 36 kg/m<sup>3</sup>

#### **ISOVER Marine Slab ULTIMATE U MPA 20-120**

Non-combustible glass wool slab covered with reinforced aluminium foil (surface weight 50 g/m<sup>2</sup>), polyethylene foil (surface weight 5 g/m<sup>2</sup>) and glass grid (surface weight 10 g/m<sup>2</sup>) glued with adhesive polyvinyl acetate (application rate 15 g/m<sup>2</sup>).  
Nominal density: 20 to 120 kg/m<sup>3</sup>

#### **ISOVER Marine Slab ULTIMATE U MPA 25 K**

Non-combustible glass wool slab covered on one side with reinforced aluminium foil with a glass fibre grid (300 g/m<sup>2</sup>).  
Nominal density: 25 kg/m<sup>3</sup>

#### **ISOVER Marine Slab ULTIMATE U MPAA 66**

Non-combustible glass wool slab covered on both sides with aluminium fibreglass composite (surface weight 80 g/m<sup>2</sup>).  
Nominal density : 66 kg/m<sup>3</sup>

#### **ISOVER Marine Slab ULTIMATE U MPB 20-100**

Non-combustible glass wool slab covered with glass cloth / aluminium composite (surface weight 220 g/m<sup>2</sup>).  
Nominal density: 20 to 100 kg/m<sup>3</sup>

#### **ISOVER Marine Slab ULTIMATE U MPG 20 to U MPG 90**

Non-combustible glass wool slab covered with glass fabric (surface weight 120, 220 or 420 g/m<sup>2</sup>).  
Nominal density: 20 to 90 kg/m<sup>3</sup>

#### **ISOVER Marine Slab ULTIMATE U MPN 25 to U MPN 100**

Non-combustible glass wool slab.  
Nominal density : 25 to 100 kg/m<sup>3</sup>

#### **ISOVER Marine Slab ULTIMATE U MPV 20 to U MPV 90**

Non-combustible glass wool slab covered with a black glass fabric (surface weight 60g/m<sup>2</sup>) glued with adhesive polyvinyl acetate (application rate 10 g/m<sup>2</sup>).  
Nominal density: 20 to 90 kg/m<sup>3</sup>

#### **ISOVER Marine Slab ULTIMATE U MPX 20 to U MPX 90**

Non-combustible glass wool slab covered with a black glass fabric (surface weight 60g/m<sup>2</sup>).  
Nominal density : 20 to 90 kg/m<sup>3</sup>



**ISOVER ULTIMATE U Marine Wired Mats 36 to 66**

Non-combustible glass wool slab covered with :

V1 (glass tissue)

N (wired mesh 270 g/m<sup>2</sup>)

Alu1 (aluminium foil)

Nominal density : 36 to 66 kg/m<sup>3</sup>

**2. DOCUMENTS AND DRAWINGS:**

None.

**3. TEST REPORTS:**

Test report N° PF11769e dated 01.06.2004 and PF11769b as per IMO FTPC Part 1 from DIFT Laboratories, Denmark.

Test report N° PFB1004b dated 01.08.2011 as per IMO FTPC Part 1 from DIFT Laboratories, Denmark.

Test report N° NN06/4862.2 dated 09.05.2007 & N° NN06/4862.3 dated 09.05.2007 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

Test report N° PF11769a dated 25.06.2004 as per IMO FTPC Part 1 from DIFT Laboratories, Denmark.

Test report N° PF11769d dated 01.06.2004, N° PF11769c dated 01.06.2004, N° PF11881i dated 04.10.2004 & N° PFB10004a dated 01.08.2011 as per IMO FTPC Part 1 from DIFT Laboratories, Denmark.

Test report N° NN06/5071.1 dated 20.02.2007, N° NN06/5071.2 dated 16.02.2007, N° NN06/5071.3 dated 20.02.2007, N° NN06/5071.4 dated 20.02.2007 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

Test report N° NN05/4599.2 dated 12.07.2007 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

Test report N° 2011-B-3446/02 dated 09/09/2011 as per IMO FTP Code, Annex 1, Part 1 issued by MPA Dresden, Germany, and N° NN08/6150.1 dated 14/10/2008 as per IMO FTP Code, Annex 1, Part 1 issued by TÜV Laboratories, Germany.

Test report N° NN06/4862.4 dated 21.07.2006 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

Test report N° NN06/4862.1 dated 06.07.2007 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

Test report N° NN09/6790.1 dated 01.10.2009, NN09/6790.2 dated 01.10.2009 and NN10/7191.1 dated 12.05.2010 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

Test reports N° PF11769h dated 02.06.2004, N° PF11881b dated 04.10.2004, N° PF11881c dated 04.10.2004, N° PF11881d dated 04.10.2004, N° PF11881f dated 04.10.2004 as per IMO FTPC Part 1 from DIFT Laboratories, Denmark and N° 2010-B-4895.5 dated 25.01.2011 from MPA Dresden GmbH.

Test reports N° PF11734 dated 16.03.2004 & N° PF11769r dated 09.06.2004 as per IMO FTPC Part 1 from DIFT Laboratories, Denmark / N° NN06/4714.1 dated 13.04.2006 as per IMO FTPC Part 1 from TÜV Laboratories, Germany / N° 2009CS011684/1 dated 14.07.2009 and N° 2009CS011684/2 dated 15.07.2009 as per IMO FTPC Part 1 from RINA Laboratories, Italy.

Test report N° 2011-B-3446/01 dated 09/09/2011 as per IMO FTP Code, Annex 1, Part 1 issued by MPA Dresden, Germany.

Test report N° PF11769f dated 02.06.2004 as per IMO FTPC Part 1 from DIFT Laboratories, Denmark.

Test reports N° NN05/4599.3 dated 12.07.2007 & N° NN05/4599.1 dated 12.07.2007 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

Test reports N° 2008CS013180/1 dated 14.07.2009, N° 2008CS013180/1 dated 14.07.2009 as per IMO FTPC Part 1 from RINA Laboratories, Italy / Test report N° PF12943b dated 23.09.2008 and PF12943a dated 23.09.2008 as per IMO FTPC Part 1 from DIFT Laboratories, Denmark.

Test report N° 2010-B-4895.2 dated 24.01.2011 as per IMO FTPC Part 1 from MPA Dresden, Germany.

Test report N° 2010-B-4895.4 dated 25.01.2011 as per IMO FTPC Part 1 from MPA Dresden, Germany.

Test report N° NN09/6374.1 dated 15.05.2009 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

Test report N° NN09/6493 dated 02.06.2009 as per IMO FTPC Part 1 from TÜV Laboratories, Germany.

**4. APPLICATION / LIMITATION:**

None.

**5. PRODUCTION SURVEY REQUIREMENTS:**

The non-combustible products are to be manufactured, examined and tested by Saint-Gobain Isover G+H AG in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

Production sites are to be recognized by Bureau Veritas as per NR320 for HBV products. To this end Saint-Gobain Isover G+H AG has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.

**6. MARKING OF PRODUCT:**

The product or packing is to be marked with manufacturer name, type, designation and fire-technical rating.

**7. OTHERS:**

This approval is given on the understanding that the Manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper methods of fitting and general maintenance of the approved equipment and the conditions of this approval.

**\*\*\* END OF CERTIFICATE \*\*\***