

## PROMAGLAF®-HTK 1100

### Sound Absorption Flexible Mat Incombustible Bio-Soluble Fibre



[www.promat-marine.com](http://www.promat-marine.com)





### Introduction

PROMAGLAF® HTK 1100 is a needled flexible felt in bio-soluble fibre with low bio-persistence, capable of high thermal performances at high temperatures. It is particularly compact and free from binders. Thanks to its excellent tensile strength, as well as vibrations resistance, it is suitable for application in marine and industry, where thermal requirements shall be met, in addition to acoustic ones.

### Quality Assurance

Promat products are manufactured to stringent quality control systems to assure that our customers receive materials made to the highest standards.

Operating to these standards means that all activities, which have a bearing upon quality, are set out in written procedures.

Systematic and thorough checks are made on all materials and their usage. Test equipment is subjected to regular checks and is referred back to national standards.

The information given in this data sheet is based on actual tests and is believed to be typical of the product. No guarantee of results is implied however, since conditions of use are beyond our control.

### Physical and technical properties

|  |                   |                      |                       |
|--|-------------------|----------------------|-----------------------|
| Classification temperature (ENV 1094-3)                      | °C                | 1100                 |                       |
| Melting point  | °C                | >1250                |                       |
| Density  | Kg/m <sup>3</sup> | 96-128               |                       |
| Fibres average diameter                                      | µm                | 3.5                  |                       |
| Resilience with 50% compression at environmental temperature | %                 | 70-75                |                       |
| Resilience after 168hrs at 1100°C (compression 50%)          | %                 | 70                   |                       |
| Tensile strength   | kPa               |                      |                       |
| 96Kg/m <sup>3</sup>  |                   | 50                   |                       |
| 128Kg/m <sup>3</sup>   |                   | 70                   |                       |
| Local distortion, 24 hrs (ENV 1094-7) dipped:                | %                 |                      |                       |
| 900°C  |                   | 1.0                  |                       |
| 1100°C   |                   | 1.5                  |                       |
| 1260°C   |                   | -                    |                       |
| Thermal conductivity λ: (ASTM C 201)                         | W/mK              | 96 Kg/m <sup>3</sup> | 128 Kg/m <sup>3</sup> |
|  |                   | 0.07                 | 0.06                  |
|  |                   | 0.11                 | 0.10                  |
|  |                   | 0.17                 | 0.15                  |
|  |                   | 0.25                 | 0.20                  |
|  |                   | 0.32                 | 0.27                  |
| Chemical composition:  | %                 |                      |                       |
| SiO <sub>2</sub>   |                   | 50 - 65              | 65 - 80               |
| ZrO <sub>2</sub>   |                   | < 1                  | < 2                   |
| MgO+CaO  |                   | 20 - 39              | 22 - 40               |
| Al <sub>2</sub> O <sub>3</sub>                               |                   | < 1                  | < 1                   |
| Resistance vs. acids (2N HCl at 81°C, 4 hrs)                 | %                 | 6.2                  | 6.2                   |
| Resistance vs. alkali (2N NaOH at 81°C, 4 hrs)               | %                 | 6.2                  | 6.5                   |
| Reaction to fire   |                   | Certificate n° MED   |                       |
| DIR 96/98/EC as modified DIR 2009/26/EC                      |                   | 281911CS/002         |                       |

### Workability

PROMAGLAF® HTK 1100 is flexible and can be easily cut by cutters, cutting-dies and scissors. The product can easily be fixed by pins on the surfaces to be insulated.

### Standard dimensions for all densities

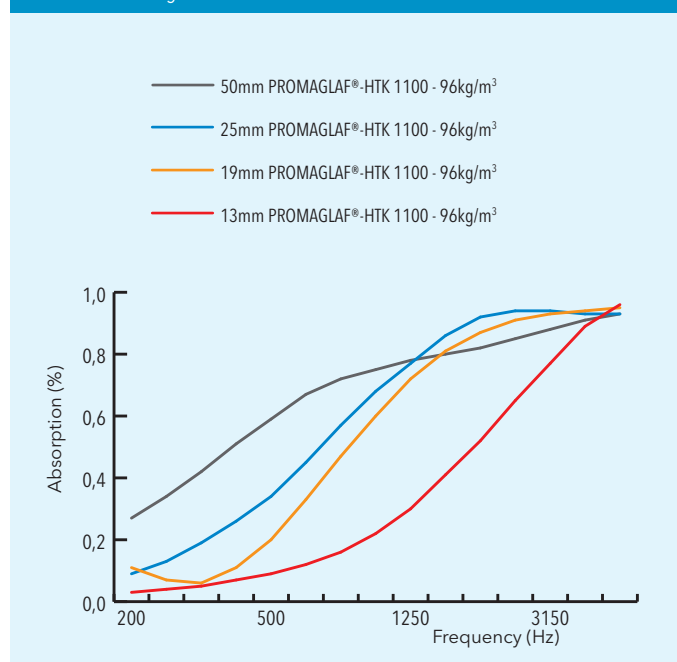
| Thickness (mm) | m <sup>2</sup> /roll | Length (mm) | Width (mm) |
|----------------|----------------------|-------------|------------|
| 13             | 14.640               | 610         | 8,93       |
| 19             | 5.880                | 610         | 3,58       |
| 25             | 7.320                | 610         | 4,46       |
| 38             | 4.880                | 610         | 2,97       |
| 50             | 3.660                | 610         | 2,23       |

### Standard packaging

20 rolls per pallet

### Acoustic performance

Acoustic Absorption of PROMAGLAF®-HTK 1100 - density of 96kg/m<sup>3</sup>  
13, 19, 25 and 50mm thicknesses  
Evaluation according to ISO 10532



Acoustic Absorption of PROMAGLAF®-HTK 1100 - density of 128kg/m<sup>3</sup>  
13, 19, 25 and 50mm thicknesses  
Evaluation according to ISO 10532

