



Certificate No. 01-014447/0110887

## TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

**TYPE AND DESCRIPTION OF PRODUCT:**

AQUATHERM GREEN PIPE SDR6 S / 7,4 S / 11 S  
AQUATHERM GREEN PIPE SDR7,4 MS / MF; SDR9 MF-RP  
AQUATHERM BLUE PIPE SDR7,4 MF; SDR 11 S / MF-RP; SDR17,6 MF-RP  
AQUATHERM RED PIPE SDR7,4 MR-HI  
AQUATHERM GREEN PIPE FITTINGS

Thermoplastic pipes and fittings, type 3.

Maximum allowable working pressure and temperature according to the specification of the manufacturer.

**MANUFACTURER:**

**AQUATHERM GmbH**  
BIGGEN 5  
57439 ATTENDORN  
GERMANY

**THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:**

The Rules for Technical Supervision of Sea-going Ships to the Croatian Register of Shipping; Part 8- Pipelines- 1.7 and Part 24.- Nonmetallic Materials- 10; IMO Res. A753(18) as amended by IMO resolution MSC.313(88) and MSC.399(95) without fire endurance test; SKZ Specification for Tests and Inspection of PP- Pressure Pipe Systems HR 3.10.11.95 and HR 3.28:2019-06.

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: 2024-10-10

Place and date: Split, 2020-11-17 Seal .....

Marinko Popović, dipl.ing

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

**DETAILED PRODUCT DESCRIPTION:**

**Polypropylene pipes and fittings.**

**APPLICATION / LIMITATIONS:**

**Drinking and sanitary water as well as heating systems which are installed behind B-Class or C-Class ceilings and linings. In case no ceiling or lining is existing the pipes are to be provided with suitable insulation. These pipes may not be used wherever a fire endurance level is required according to IMO Res.A.753(18) as amended by IMO resolution MSC.313(88) and MSC.399(95).**

**TYPE APPROVAL DOCUMENTATION:**

**Aquatherm product catalogue , dated 06/2013  
Burst pressure test report; DIN 8077, DIN 8078, DIN EN ISO 15874-2-5, dated 2015-09-04  
External load test report; IACAS UR P4 dated 2015-09-04  
Test report verified by DNV-GL dated 2020-02-03; DIN EN ISO 1167, DIN EN 1411, ASTM D2924  
RINA fire test reports: 2020CS011405/1, 2020CS011405/2, 2020CS011405/3, 2020CS011405/4; ASTM D635/18**

**MARKING OF PRODUCT:**

**Name of manufacturer or trademark, Type and size of the Product, nominal pressure, date of manufacture and type number identification.**

**CONDITIONS FOR CERTIFICATION:**

**Technological parameters of the application shall to be chosen according to the manufacturer's instructions and requirements of the rules to the Croatian Register of Shipping.  
For each particular case of the application detailed drawings of each piping system should be submitted for approval. The installation of the piping system is to be carried out by qualified personnel under supervision of the Croatian Register of Shipping. Each pipe and accessory is to be marked clearly to avoid any wrong utilization.**