



*AS/NZS 4020:2005 Compliance Testing*  
***Certificate of Analysis***  
*(Supersedes all interim reporting)*  
***Dated: 10/11/2014***

**1. CERTIFICATE OF ANALYSIS AND SAMPLE INFORMATION:**

**Methodology:** AS/NZS 4020, *Appendix A* and in-house method TMP-191100 & TMP-191101

**AMS Report Reference No.:** 1415603  
**Cross Reference No.:** NA  
**Submitting Organisation:** Aquatherm Australia Pty. Ltd.  
**Contact:** Bryce Christain  
**Address:** PO BOX 785, Revesby, NSW 2212, Australia  
**Interim Reporting:** 08/09/2014  
**Project Completion Date:** 10/11/2014

**Product Designation:** Aquatherm PPR Pipe 20mm SDR 7.4 MF & PPR Fitting 20mm x ½"  
transition art # 21308  
Print on green Pipe: 'aquatherm green pipe SDR7,4 MF (fusiotherm-  
Faserverbundrohr) 20x2, 8mm Art. No.: 70708 fusiolen PP-R/PP-R-  
GF/PP-R W LIC 2437 CSA B137.11 ASTM F2389 metric SK2 A 314  
O VGW W 1.382'

**Batch No./ Manufacturing Date:** Not Provided

**Product Manufacturer:** Aquatherm GmbH  
Biggen 5 – D-57439 Attendorn, Germany

**Sampling Organisation:** Aquatherm Australia Pty. Ltd.

ams Laboratory Final Report for the testing of a product to AS/NZS 4020, Products for use in contact with Drinking Water	AMS Report No.: 1415603
Submitting Organisation: Aquatherm Australia Pty. Ltd.	
Product: Aquatherm PPR Pipe 20mm SDR 7.4 MF & PPR Fitting 20mm x 1/2" transition art # 21308	Date of Report: 10/11/2014

**General Composition:** Polypropylene Random Co –Polymer, Refer to Attachment A

**Product Use:** In-Line

**Temperature Range:** 70°C

**Previous Testing:** NA

**Date of receipt of samples:** 13/08/2014 & 24/09/2014

**Sample selection for tests:** As provided by the Submitting Organisation

**Sample storage conditions:** Prepared and controlled as per AS/NZS 4020, *Appendix A*

**Extracts:** Prepared as per AS/NZS 4020, *Appendices C, D, E, F, G & H*

**Testing procedure:** Testing is based on the recommended 'in-the-product' exposure of pipe and fitting system (1 system = 1 x ~1m 20mm pipe + 1 x 20mm PP-R/brass fitting) at (70 ± 2)°C to cover a cold and hot water application up to ~70°C.  
  
Refer to Attachment A for Product Composition Details.

**Volume retention:** ~160mL per system

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## 2. SUMMARY OF RESULTS:

APPENDIX	RESULTS
C - TASTE	PASS at testing exposure
D - APPEARANCE	PASS at testing exposure
E - GROWTH OF AQUATIC MICRO-ORGANISMS	PASS at testing exposure
F - CYTOTOXIC ACTIVITY	PASS at testing exposure
G - MUTAGENIC ACTIVITY	PASS at testing exposure
H - EXTRACTION OF METALS	PASS at testing exposure

Based on completion and evaluation of all tests on 10/11/2014, the product, **Aquatherm PPR Pipe 20mm SDR 7.4 MF & PPR Fitting 20mm x 1/2" transition art # 21308**; **fully complied** with the test requirements of AS/NZS 4020:2005 to cover a cold and hot water application up to ~70°C, at the recommended 'in-the-product' exposure of pipe and fitting system (1 system = 1 x ~1m 20mm pipe + 1 x 20mm PP-R/brass fitting) at (70 ± 2)°C.

Testing although determined by the relevant product Standard, is generally recognised for up to 5 years by the certifying body, providing the testing procedures remain the same, and the background information on all wetted parts and the product are adequately documented. Also, the results stated in the report relate to the samples of the product submitted for testing. Any changes in the material formulation and supplier/manufacturer of all wetted items, the process of manufacture, the method of application, or the surface area-to-volume ratio in the end-use, could affect the suitability of the product for use in contact with drinking water, and re-testing may be required before this actual time frame, governed by the completion and evaluation date.

Signed:



SANDHYA L. SINGH B. Tech, Postgrad. Dip. (Chem)  
Manager, Chemistry and Toxicology; Approved Signatory

Date: 10/11/2014