



Acu-Tech Pty Ltd

PRODUCT APPRAISAL REPORT 1402 Issue 2

Polyethylene (PE) Pressure Pipe

AS/NZS 4130:2018 Polyethylene pipes for pressure applications

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Peer Reviewers

Name/Title	Organisation	Date
Product Appraisal Technical Advisory Group	WSAA	14 May 2014
WSAA Expert Panel	WSAA	14 May 2014
Carl Radford, Product Appraisal Manager	WSAA	19 June 2014
Peter Pittard, WSAA Consultant	WSAA	9 December 2020
Carl Radford, Product Appraisal Manager	WSAA	21 December 2020

Overview of WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Based around our vision of 'customer driven, enriching life', WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. We are proud of the collegiate attitude of our members which has led to industry-wide approaches to national water issues.

WSAA can demonstrate success in the standardisation of industry performance monitoring and benchmarking, as well as many research outcomes of national significance. The WSAA Executive retains strong links with policy makers and legislative bodies and their influencers, to monitor emerging issues of importance to the urban water industry.

WSAA was formed in 1995 as a non-profit organisation to foster the exchange of information between industry, government and the community, and to promote sustainable water resource management.

The urban water industry is committed to anchoring its services to customers' values, and to enrich communities where water services have broad economic, environmental and social values. In line with this our main activities focus on four areas:

1. influencing national and state policies on the provision of urban water services and sustainable water resource management
2. promoting debate on environmentally sustainable development and management of water resources and the community health requirements of public water supplies
3. improving industry performance and establishing benchmarks and industry leading practices for water service processes; and
4. fostering the exchange of information on education, training, research, water and wastewater management and treatment and other matters of common interest.

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1 EXECUTIVE SUMMARY

Acu-Tech Pty Ltd is a manufacturer and supplier of thermoplastic pipeline systems for fluid and gas transfer and cable protection. Products are manufactured primarily from polyethylene and polypropylene materials and are utilized for a wide range of applications in the plumbing, mining, civil and mechanical services markets.

This Appraisal is for a range of Series 1 PE100 plain wall pipes manufactured in sizes from DN 20 to DN 800 with pressure classifications from PN 4 to PN 25 in accordance with AS/NZS 4130:2018 – *Polyethylene (PE) pipes for pressure applications*.

This Issue 2 is to replace the previous Appraisal report that had reached its expired date.

Acu-Tech has confirmed that their procedures incorporate WSAA requirements regarding the use of recycles and the frequency of thermal stability testing for batch release tests. See Section 6.2.5.

Pipes are available in lengths of 6 m, 12 m or 20 m for all sizes and pressure ratings. DN 20 to DN 160 pipes are available in coil lengths of 50m, 100m, 150m and 200m depending on size and PN rating.

Acu-Tech PE100 pipes are available as black with blue, purple or cream stripes for drinking water, non-drinking water and pressure and non-pressure sewer applications respectively. Pipes for sewer applications are also available with a cream internal jacket and pipes for non-drinking water are also available with an outer purple jacket. Plain black pipes are available for multi-purpose use.

Acu-Tech Pty Ltd has a Quality Management System certification to ISO 9001:2015.

The Acu-Tech PE100 pipe range is covered by a Type 5 ApprovalMark Product Certification to AS/NZS 4130:2018.

This Appraisal has determined that Acu-Tech PE 100 pipe meets the requirements of WSA PS 207 – *Polyethylene (PE) Pipes for Pressure Applications – Drinking Water, Non-Drinking Water Supply and Sewerage* and WSA PS 215 – *Polyethylene (PE) Property Service for Pressure Applications – Drinking Water and Non-Drinking Water Supply* and are considered as 'fit for purpose'.

1.1 Recommendations

It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise the Acu-Tech range of PE100 pipes for use in water supply and sewerage pressure pipelines, provided they are installed in accordance with WSAA Codes and the manufacturers requirements, where specified.

2 THE APPLICANT

The Applicant is Acu-Tech Pty Ltd.

2.1 The Manufacturer / Supplier

Acu-Tech Pty Ltd is a privately owned and operated company based in Perth with branches in Melbourne, Sydney and Brisbane. The company was established in 2000 and is a manufacturer and supplier of thermoplastic pipeline systems for fluid and gas transfer and cable protection. Products are manufactured primarily from polyethylene and polypropylene materials and are utilized for a wide range of applications in the plumbing, mining, civil and mechanical services markets.

Poly Weld Tech Academy, a subsidiary of Acu-Tech, is an accredited training and testing facility offering fusion welding training together with material and weld testing through its accredited NATA certified laboratory.

3 THE PRODUCT

This Appraisal is for a range of Series 1 PE100 plain wall pipes manufactured in sizes from DN 20 to DN 800 with pressure classifications from PN 4 to PN 25 in accordance with AS/NZS 4130:2018 – *Polyethylene (PE) pipes for pressure applications*.

Pipes are available in lengths of 6 m, 12 m or 20 m for all sizes and pressure ratings. DN 20 to DN 160 pipes are available in coil lengths of 50m, 100m, 150m and 200m depending on size and PN rating.

Acu-Tech PE100 pipes are available as black with blue stripes (Acu-Water), purple stripes (Recycle-Tech) or cream stripes (Acu-Sewer) for drinking water, non-drinking water and pressure or non-pressure sewer applications respectively. Pipes for sewer applications are also available with a cream internal jacket and pipes for non-drinking water are also available with an outer purple jacket. Plain black pipes (Acu-Black) are available for multi-purpose use.

The details are as follows:

- Series 1
- Material Classification: PE100
- Pressure Classifications:
Acu-Water for Drinking Water - PN12.5, PN16, PN20, and PN25.
Recycle-Tech for Non-Drinking Water, Acu-Sewer for Sewer, Acu-Black for multi-purpose – PN4, PN6.3, PN8, PN10, PN12.5, PN16, PN20 and PN25.
- Sizes –DN 20, DN 25, DN 32, DN 40, DN 50, DN 63, DN 75, DN 90, DN 110, DN125, DN 140, DN 160, DN 180, DN 200, DN 225, DN 250, DN 280, DN 315, DN 355, DN 400, DN 450, DN 500, DN 560, DN 630, DN 710 and DN 800.

4 SCOPE OF THE APPRAISAL

The Scope of this Appraisal is for a range of PE 100 pressure pipe as detailed in Section 3 and included in the ISO Type 5 ProductMark product certification schedule included in Appendix B.

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts PE 100 pipes manufactured in compliance with AS/NZS 4130:2018 *Polyethylene (PE) pipes for pressure applications* and duly certified by means of an ISO Type 5 product certification scheme undertaken by a JAS-ANZ accredited Certification Assessment Body (CAB) or by an international accreditation system recognised by JAS-ANZ.

The manufacturer is generally expected to have a production management and control system that has been duly accredited in accordance with AS/NZS ISO 9001 as a prerequisite to undergoing a product certification audit.

The ISO Type 5 Product Certification Scheme shall meet the criteria described in WSA TN-08.

5.2 Performance Requirements

Acu-Tech PE100 PE pressure pipe has been appraised for compliance with AS/NZS 4130:2018 *Polyethylene (PE) pipes for pressure applications*.

Appraisal criteria are also determined by the WSAA Product Appraisal Technical Advisory Group and regularly reviewed to ensure that the criteria reflect the requirements of WSAA members.

The following Product Specifications are relevant to this application.

- WSA PS 207 – *Polyethylene (PE) Pipes for Pressure Applications – Drinking Water, Non-Drinking Water Supply and Sewerage.*
- WSA PS 215 – *Polyethylene (PE) Property Service for Pressure Applications – Drinking Water and Non-Drinking Water Supply.*

Copies of the Product Specifications are available at the following link:

<https://www.wsaa.asn.au/shop/product/35716>

6 COMPLIANCE WITH APPRAISAL CRITERIA

6.1 Compliance with Quality Assurance Requirements

Acu-Tech has submitted the following quality certificates:

- ISO 9001:2015 Certificate of Registration No. 75367 issued to Acu-Tech Pty Ltd by ApprovalMark International.
- AS 4130:2018 ISO Type 5 ProductMark Product Certification Licence No. AMI 74541 issued to Acu-Tech Pty Ltd by ApprovalMark International.

Copies of the Quality Assurance and Product Certification licences have been included in Appendix B and are also available from WSAA.

6.2 Compliance with Performance Requirements

6.2.1 Polyethylene (PE) compounds

Acu-Tech has provided certificates of analysis for the following PE100 compounds that are used for the manufacture of the pipe: Qenos HCR193B, Borouge HE3490LS, Borouge HE3490LSH IRPC P901BK, Lyondell Basell CRP100RCD, Sabic P6006AD, SCG H112PC and SCG H1000PC.

These PE compounds are all listed in PIPA POP004 as complying with AS/NZS 4131.

Lyondell Basell CRP100RCD and Qenos HCR193B are also listed in POP004 as meeting the requirements of POP016 for High Stress Crack Resistant PE100.

6.2.2 Type Tests

Acu-Tech has provided copies of Type Test reports for the original Appraisal to demonstrate compliance with the performance requirements of AS/NZS 4130. These tests demonstrate resistance to internal pressure, reversion, thermal stability and slow crack growth resistance and are only required to be repeated for new material formulation.

6.2.3 Suitability for contact with drinking water

The PE100 compounds Qenos HCR193B, Borouge HE3490LS, Borouge HE3490LSH IRPC P901BK, Lyondell Basell CRP100RCD, Sabic P6006AD are listed in PIPA POP004 as complying with AS/NZS 4020:2005. SCG H112PC and SCG H1000PC are compliant with AS/NZS 4020:2018.

6.2.4 Colour coding

Acu-Tech PE 100 pressure pipe complies with the colour coding scheme specified in AS/NZS 4130:2018:

- (a) Solid black pipe with blue stripes no darker than RAL 5012 for drinking water applications.
- (b) Solid black pipe with purple stripes no lighter than RAL 310 70 15 nor darker than RAL 330 40 40 for non-drinking water applications.
- (c) Solid black pipe with cream stripes no lighter than RAL 080 90 20 nor darker than RAL 075 80 20 for sewerage applications.

6.2.5 Batch release tests

WSAA requires that the Applicants quality plan shall include a requirement in their Batch Release Test procedure that a thermal stability test is undertaken on the first pipe manufactured in a batch of a particular DN and PN and at ongoing frequencies not exceeding 24 hours of production for that batch. The quality plan is also required to include a requirement that use of recyclate in manufactured pipe other than from the manufacturer's own clean in-house production is prohibited.

Acu-Tech Pty Ltd has provided a copy of their procedures to verify compliance to these requirements.

7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

PE pressure pipe has been a commonly used product in the urban water industry for many years. Acu-Tech PE pipe is compatible with fittings manufactured in accordance with AS/NZS 4129 *Fittings for polyethylene pipes for pressure applications*.

For specific design and installation information relating to PE pressure pipelines and PE gravity pipelines refer to the WSAA Polyethylene Pipeline Code - WSA 01 available at the WSAA web site www.wsaa.asn.au or AS/NZS 2033:2008 *Installation of polyethylene pipe systems*.

Electrofusion welding, butt fusion and mechanical compression fittings may be used for joining pipe-to-pipe or fitting-to-pipe. All welding shall be performed by welders who have successfully completed training by a Registered Training Organisation, endorsed by the Plastics Industry Pipe Association for the relevant welding method(s).

The Plastics Industry Pipe Association provides technical guidelines for jointing in the following documents.

POP001 Electrofusion Jointing of Pipe and fittings for Pressure Applications.

POP003 Butt Fusion Jointing of PE Pipes and Fittings – Recommended Parameters.

POP001 contains recommendations for equipment required, for jointing, maintenance, servicing and calibration procedures, records to be kept and the training program to be respected to produce good fusion joints in polyethylene pipes.

POP003 is a guide to the butt fusion of polyethylene pipe using AS/NZS 4130 material as a basis, recommending the butt fusion procedures and parameters as specified in ISO 21307.

Copies of these documents can be downloaded from the PIPA website www.pipa.com.au.

8 PRODUCT MARKING

Acu-Tech pipes are marked in accordance with the requirements of AS/NZS 4130:2018 as follows:

- Manufacturers Name: ACU-TECH
- Trademark: e.g., ACU-WATER
- Pipe Series Number: S1
- DN: e.g., DN 180
- Pressure: e.g., PN16
- SDR: e.g., SDR11
- PE material classification: PE100
- Date of manufacture: e.g., 201130 (i.e., 30th November 2020)
- Place of manufacture: Made in WA

- Extrusion Line No: e.g., L3
- The standard number: AS/NZS 4130
- ISO Type 5 Licence No: AMI 74541
- Special Application information: e.g., RECYCLED WATER - DO NOT DRINK or SEWAGE

Example: ACU-WATER™ PBS11013012 S1 DN110 PN16 SDR11 PE100 AS/NZS 4130 W WMKA 22040 AMI 74541 MADE IN WA BY ACU-TECH (08) 9238 8000 YYMMDD HHmm L3

9 PACKAGING AND TRANSPORTATION

Acu-Tech advises that transport, handling and storage as set out in AS/NZS 2033 is recommended. Acu-Tech has documented packaging and delivery procedures for transporting pipes of various sizes from their plant. Pipe is packaged using timber bases and scalloped slats between each row, as well as strapping to minimise movement during transport.

Agencies should ensure pipe is inspected when delivered to site to see that there has been no transport damage caused by movement and abrasion or serious distortion caused by excessive tightening of holding straps.

Pipes are delivered by road transport and delivered directly to site, unless advised otherwise by customers.

The Plastics Industry Pipe Association also provides technical guidelines for Packaging, Handling and storage of Polyethylene pipe and fittings in POP005 Packaging, Handling, and Storage of Polyethylene Pipes and Fittings.

Copies of these documents can be downloaded from the PIPA website www.pipa.com.au.

10 PRODUCT WARRANTY

The products are covered by the normal commercial and legal requirements of the *Competition and Consumer Act 2010 (Cth)*, which covers manufacture to the relevant standard, and details of Acu-Tech's warranty is included in their terms and conditions of sale.

11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD-TESTING REPORT

Acu-Tech PE 100 pipe is already approved by many Australian Water Agencies.

12 OUTCOMES OF EXPERT PANEL PRODUCT REVIEW

No issues have been raised.

13 FUTURE WORKS

No future works have been identified.

14 DISCLAIMER

This Product Appraisal Report (Report) is issued by the Water Services Association of Australia Limited on the understanding that:

This Report applies to the product(s) as submitted. Any changes to the product(s) either minor or major shall void this Report.

To maintain the recommendations of this Report any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the Report and appropriate action. Appraisals and their recommendations will be the subject of continuous review dependent upon the satisfactory performance of products.

WSAA reserves the right to undertake random audits of product manufacture and installation. Where products fail to maintain appraised performance requirements the appraisal and its

recommendations may be modified and reissued. Appraisal reports will be reviewed and reissued at regular intervals not exceeding five (5) years.

The following information explains a number of very important limits on your ability to rely on the information in this Report. Please read it carefully and take it into account when considering the contents of this Report.

Any enquiries regarding this report should be directed to the Program Manager, Carl Radford, Phone: 03 8605 7601 email carl.radford@wsaa.asn.au.

14.1 Issue of Report

This Report has been published and/or prepared by the Water Services Association of Australia Limited and nominated Project Manager and peer group of technical specialists (the Publishers).

The Report has been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Report (the Recipients).

By accepting this Report, the Recipient acknowledges and represents to the Publisher(s) and each person involved in the preparation of the Report that the Recipient has understood and accepted the terms of this Disclaimer.

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This Report does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it (Product). The product appraisal criteria used in preparing this Report may not address all relevant aspects of the Product.

Recipients should seek independent evidence of any matter which is material to their decisions in connection with an assessment of the Product and consult their own advisers for any technical information required. Any decision to use the Product should take into account the reliability of that independent evidence obtained by the Recipient regarding the Product.

Recipients should also independently verify and assess the appropriateness of any recommendation in the Report, especially given that any recommendation will not take into account a Recipient's particular needs or circumstances.

WSAA has not evaluated the extent of the product liability and professional indemnity insurance that the provider of the product maintains. Recipients should ensure that they evaluate the allocation of liability for product defects and any professional advice obtained in relation to the product or its specification including the requirements for product liability and professional indemnity insurance.

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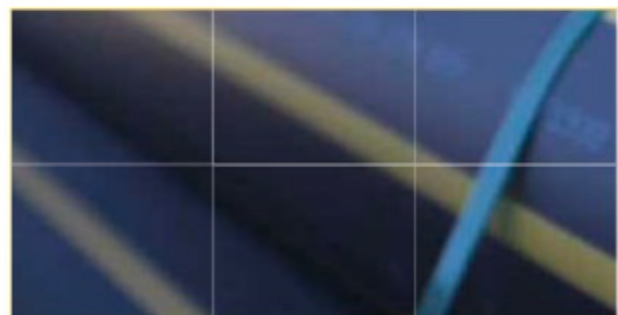
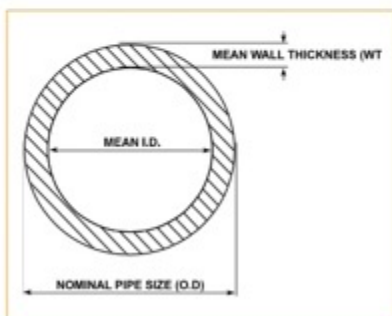
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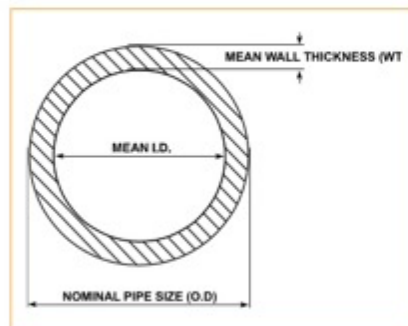
APPENDIX A – PRODUCT LITERATURE

OD	SDR41 PN 4			SDR26 PN 6.3			SDR21 PN 8			SDR 17 PN 10		
	WT	ID	KG/M	WT	ID	KG/M	WT	ID	KG/M	WT	ID	KG/M
16	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	1.8	21.7	0.1
32	-	-	-	-	-	-	1.8	28.7	0.2	2.1	28.1	0.2
40	-	-	-	-	-	-	2.1	36.1	0.2	2.6	35.0	0.3
50	-	-	-	-	-	-	2.6	45.1	0.4	3.2	43.9	0.4
63	-	-	-	2.6	58.1	0.5	3.2	56.9	0.6	4.1	55.2	0.7
75	-	-	-	3.1	69.2	0.7	3.9	67.7	0.8	4.8	65.8	1.0
90	-	-	-	3.8	83.0	1.0	4.6	81.3	1.2	5.8	79.0	1.5
110	2.9	104.7	0.9	4.6	101.3	1.5	5.7	99.2	1.8	7.0	96.5	2.2
125	3.4	118.9	1.2	5.1	115.4	1.8	6.4	112.9	2.3	7.9	109.9	2.8
140	3.8	133.2	1.5	5.8	129.2	2.3	7.1	126.5	2.9	8.8	123.1	3.5
160	3.6	153.6	1.7	6.6	147.6	3.1	8.2	144.5	3.7	10.1	140.7	4.6
180	4.7	171.5	2.5	7.3	166.3	3.8	9.1	162.7	4.7	11.3	158.3	5.8
200	4.5	192.0	2.6	8.2	184.6	4.7	10.2	180.6	5.8	12.6	175.8	7.1
225	5.0	216.1	3.3	9.1	207.9	5.9	11.4	203.3	7.3	14.2	197.8	9.0
250	6.6	238.0	4.8	10.2	230.9	7.3	12.6	226.1	9.0	15.6	220.0	11.0
280	7.3	266.7	6.0	11.3	258.7	9.2	14.2	253.0	11.4	17.5	246.3	13.9
315	8.2	300.2	-	12.8	290.9	11.7	15.8	284.9	14.3	19.7	277.1	17.5
355	9.2	338.2	-	14.4	327.9	14.7	17.8	321.0	18.1	22.3	312.1	22.3
400	10.4	380.0	-	16.2	369.5	18.7	20.2	361.5	23.1	25.0	351.9	28.2
450	11.6	428.9	15.3	18.2	415.8	23.6	22.7	406.8	29.2	28.1	395.9	35.8
500	13.0	476.3	19.1	20.2	462.0	29.2	25.2	452.0	36.2	31.2	440.0	44.1
560	14.5	533.6	23.8	22.6	517.4	36.6	28.1	506.3	45.1	35.0	492.6	55.3
630	16.3	600.4	30.1	25.4	582.1	46.3	31.6	569.8	56.9	39.3	554.4	69.9
710	18.4	676.5	38.3	28.7	655.9	58.9	35.7	641.9	72.5	44.3	624.6	88.9
800	20.7	762.3	48.5	32.2	739.2	74.6	40.1	723.4	91.9	49.9	703.9	112.8
900	23.2	857.8	61.2	36.2	831.7	94.3	45.1	813.9	116.3	56.3	791.6	143.1
1000	25.8	952.9	75.8	40.2	924.1	116.4	50.2	904.2	143.7	62.4	879.8	176.3
1200	31.0	1143.1	109.1	48.3	1108.5	167.6	60.2	1084.7	206.8	74.8	1055.3	253.9

12



OD	SDR13.6 PN 12.5			SDR11 PN 16			SDR9 PN 20			SDR 7.4 PN 25		
	WT	ID	KG/M	WT	ID	KG/M	WT	ID	KG/M	WT	ID	KG/M
16	-	-	-	1.8	12.7	0.1	2.0	12.3	0.1	2.4	11.4	0.1
20	1.8	16.7	0.1	2.1	16.1	0.1	2.5	15.2	0.1	3.0	14.2	0.2
25	2.1	21.1	0.1	2.5	20.2	0.2	3.0	19.2	0.2	3.8	17.7	0.2
32	2.6	27.0	0.2	3.1	26.0	0.3	3.9	24.5	0.3	4.7	22.8	0.4
40	3.2	33.8	0.4	4.0	32.3	0.4	4.8	30.6	0.5	5.9	28.5	0.6
50	4.0	42.4	0.5	4.9	40.5	0.7	6.0	38.4	0.8	7.3	35.7	0.9
63	5.0	53.3	0.9	6.2	51.0	1.1	7.6	48.2	1.3	9.1	45.1	1.5
75	5.9	63.7	1.2	7.2	61.0	1.5	8.9	57.6	1.8	10.9	53.6	2.1
90	7.0	76.5	1.8	8.7	73.1	2.1	10.7	69.1	2.6	13.0	64.5	3.0
110	8.6	93.3	2.6	10.6	89.4	3.2	13.0	84.5	3.8	16.0	78.6	4.5
125	9.8	106.1	3.4	12.1	101.5	4.1	14.8	96.1	4.9	18.1	89.5	5.8
140	10.9	118.9	4.2	13.4	113.9	5.1	16.6	107.6	6.2	20.3	100.2	7.3
160	12.5	135.9	5.5	15.4	130.0	6.7	18.9	123.1	8.1	23.1	114.7	9.5
180	14.1	152.8	7.0	17.1	146.7	8.4	21.2	138.5	10.2	25.9	129.1	12.0
200	15.5	169.9	8.6	19.2	162.5	10.5	23.5	154.0	12.5	28.8	143.4	14.9
225	17.5	191.1	11.0	21.6	182.9	13.3	26.5	173.2	15.9	32.4	161.3	18.8
250	19.4	212.4	13.5	23.9	203.4	16.3	29.4	192.5	19.5	36.0	179.2	23.2
280	21.7	237.9	16.9	26.8	227.8	20.4	33.0	215.4	24.6	40.3	200.7	29.1
315	24.5	267.6	21.4	30.1	256.3	25.9	37.1	242.4	31.1	45.2	226.1	36.8
355	27.5	301.6	27.2	33.9	288.8	32.8	41.7	273.3	39.4	51.0	254.6	46.8
400	31.0	339.9	34.4	38.2	325.4	41.7	47.0	307.8	50.0	57.4	287.0	59.3
450	34.9	382.4	43.6	43.0	366.1	52.8	52.8	346.5	63.3	64.7	322.8	75.1
500	38.7	424.9	53.8	47.8	406.8	65.1	58.7	385.0	78.1	71.70	358.8	92.6
560	43.4	475.8	67.5	53.4	455.7	81.6	66.1	430.3	98.4	-	-	-
630	48.7	535.5	85.4	60.2	512.6	103.4	73.9	485.1	124.6	-	-	-
710	54.9	603.4	108.5	68.5	576.2	132.6	-	-	-	-	-	-
800	61.8	680.0	137.6	80.1	643.5	166.7	-	-	-	-	-	-
900	0.0	904.1	0.0	86.0	732.2	211.0	-	-	-	-	-	-
1000	0.0	1004.5	0.0	95.1	814.4	260.4	-	-	-	-	-	-
1200	0.0	1205.0	0.0	-	-	-	-	-	-	-	-	-



APPENDIX B - QUALITY CERTIFICATIONS

Copies of the following Quality Certification Certificates are available from WSAA.

TABLE B1

ACU-TECH PTY LTD - MANAGEMENT SYSTEM

119 Kelvin Rd Maddington WA	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	QMS 75367
Certifying Agency	ApprovalMark International
First Date of Certification	16 November 2017
Current Date of Certification	16 November 2020
Expiry Date of Certification	16 November 2023

TABLE B2

ACU-TECH PTY LTD - PRODUCT CERTIFICATION

119 Kelvin Rd Maddington WA	
Product Standard/Spec.	AS/NZS 4130:2018
Certificate No.	AMI 74541
Issuing Certification Body	ApprovalMark International
First Date of Certification	5 December 2013
Current Date of Certification	18 December 2020
Expiry Date of Certification	5 December 2023

ISO 9001

CERTIFICATE OF REGISTRATION



ApprovalMark International hereby grants:

B.T FAMILY TRUST
T/A ACU-TECH PTY LTD
119 Kelvin Road,
Maddington, 6109
AUSTRALIA

Evaluated to:

ISO 9001: 2015 - QUALITY MANAGEMENT SYSTEMS

THIS COVERS THE FOLLOWING SCOPE:

"The manufacture and supply of quality polyethylene pipes and conduits for pressure and non-pressure applications".

Certificate No. QMS 75367

Issued:16th November 2020 **Originally Certified:** 16th November 2017

Expires:16th November 2023

John PRASAD
Director



Registered by: ApprovalMark International Pty Ltd (ABN 69 143 259 974) Unit 20, 33 Holbeche Road, Arndell Park NSW 2148 Australia. The assessment was carried with appropriate skill and assessment by ApprovalMark International Pty Ltd; however it will only accept its responsibility for proven negligence. The certificate remains the property of ApprovalMark International Pty Ltd.

ApprovalMark



CERTIFICATE OF CONFORMITY



ApprovalMark International hereby grants:

ACU-TECH PTY LTD

119 Kelvin Road
Maddington, WA 6109
AUSTRALIA

Evaluated to:

AS/NZS 4130:2018 – Polyethylene (PE) pipes for pressure applications

The ISO Type 5 License shall comply with all the terms and conditions As stipulated by the governance of the operating rules of the ISO Type 5 Scheme, and shall comply with the standard requirements at all times including when the standard is amended. The ISO Type 5 License only covers the product which is identified in the attached product schedule.

Certificate No. AMI 74541

Issued: 18th December 2020

Expires: 5th December 2023

Original Issue: 5th December 2013

John PRASAD
Director



Registered by: ApprovalMark International Pty Ltd (ABN 69 143 259 974) Unit 20, 33 Holbeche Road, Arndell Park NSW 2148 Australia. The assessment was carried with appropriate skill and assessment by ApprovalMark International Pty Ltd; however it will only accept its responsibility for proven negligence. The certificate remains the property of ApprovalMark International Pty Ltd.



Product Schedule

ACU-TECH PTY LTD

119 Kelvin Road
Maddington, WA 6109
AUSTRALIA

ISO Type 5 Certificate of Conformity

Evaluated to:

AS/NZS 4130:2018 – Polyethylene (PE) pipes for pressure applications

Model ID	Model Name	Brand Name	Product Description	Endorsement Date
PBK	Black PE Pipe DN20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	ACU-BLACK™	Black Pipe SDR7.4, 9, 11, 13.6, 17, 21, 26, 33 & 41	18 th December 2020
PBS	Black PE Pipe with Blue Stripe DN20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	ACU-WATER™	Black Pipe Blue Stripe SDR7.4, 9, 11, 13.6	18 th December 2020
PRS	Black PE Pipe with Red Stripe DN20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	ACU-FIRE™	Black Pipe Red Stripe SDR7.4, 9, 11	18 th December 2020
PWJ	Black PE Pipe with White Jacket DN20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	ACU-THERM™	Black Pipe White Jacket SDR7.4, 9, 11, 13.6, 17, 21, 26, 33 & 41	18 th December 2020
PYJ	Black PE Pipe with Yellow Jacket DN20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	ACU-GAS™	Black Pipe Yellow Jacket SDR7.4, 9, 11, 13.6, 17	18 th December 2020
PLJ	Black PE Pipe with Lilac Jacket DN20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	RECYCLE-TECH™	Black Pipe Lilac Stripe SDR7.4, 9, 11, 13.6, 17, 21, 26, 33 & 41	18 th December 2020
PAJ	Black PE Pipe with Aqua Jacket DN20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	ACU-AIR™	Black Pipe Aqua Jacket SDR7.4, 9, 11	18 th December 2020



Product Schedule

Model ID	Model Name	Brand Name	Product Description	Endorsement Date
PCJ	Black PE Pipe with Cream Jacket DN63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	ACU-SEWER™	Black Pipe Cream Jacket SDR7.4, 9, 11, 13.6, 17, 21, 26, 33 & 41	18 th December 2020
PWL	Black PE Pipe with Lilac Stripe on White Jacket DN20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710 & 800	RECYCLE-THERM™	Black Pipe Lilac Stripe on White Jacket SDR7.4, 9, 11, 13.6, 17	18 th December 2020

End of record

Certificate No: AMI 74541

The models identified above in the schedule are endorsed for ISO Type 5 application only.

ApprovalMark

APPENDIX C - SUPPLIER CONTACTS

ACU-TECH PIPING SYSTEMS

Perth Branch

Address 119 Kelvin Road
Maddington WA 6109

Phone 08 9238 8000

Email salesperth@acutech.com.au

Melbourne Branch

Address 47 Allied Drive
Tullamarine Vic 3043

Phone 03 9338 0300

Email salesvic@acu-tech.com.au

Brisbane Branch

Address 86 Antimony Street,
Carole Park, QLD 4300

Phone 1300 270 270

Email salesqld@acu-tech.com.au

Sydney Branch

Address 10 Herb Elliott Ave, Olympic Park,
NSW 2127

Phone 1300 270 270

Email sales@acu-tech.com.au



Melbourne Office

Level 8, Suite 8.02
401 Docklands Drive
Docklands VIC 3008

Sydney Office

Level 9 420 George Street
Sydney NSW 2000
GPO Box 915
Sydney NSW 2001

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