

Department of Standards And Metrology

Directorate General of Commerce & Industry

Dhofar Governorate





وزارة التجارة والصناعة المديرية العامة للتجارة والصناعة دائرة المواصفات والمقاييس بمحافظة ظفار

#### **TEST REPORT OF PPR PIPES AND FITTINGS**

Sample Submitted By: Sample drawn from 4 meter lot, at Eurotherm PPR Pipes And Fittings
Factory in Raysut Industrial Estate, by representative from DGSM. The sample drawn was produced on 03/02/2018.

Sample Description: 25MM DIA PN20 EUROTHERM PPR PIPE
Standards Followed: DIN 8077/8078 & DIN 16962.

Raw Material Used: PPR RA140E BOROUGE

Analyst: Mr. Niyas Musthafa Date Of Test: 05/02/2018

**Note:** All these tests are carried out in Eurotherm PPR Pipes And Fittings Factory Laboratory in Raysut, Salalah and were scrutinized by physical laboratory staff of the Department Of Standard and Metrology, Directorate General for Commerce & Industry Dhofar.

SL No	Name of the Test	Test standard	Specified Requirement	Results Obtained	Remark
1.	Surface Condition	DIN 8078	The Internal and external pipe surfaces shall be smooth.	Smooth	Complies
2.	Dimensions and Tolerances i) Outside diameter	DIN 8077	25 – 25.3 mm	25.17 mm	Complies
	ii) Wall thickness	DIN 8077	4.2 – 4.9 mm	4.35 mm	Complies
3.	Impact Strength Test (With 15J Pendulum)	DIN 8078	The failure rate of the test pieces shall not exceed 10%	Conforms	Complies
4.	Heat Reversion Test (at 135°C/120 min)	DIN 8078	Shall not exceed 2%	0.36 %	Complies
5.	Density	DIN 8078 ISO:1183	<0.91 g/cc	0.907 g/cc	Complies
6.	Melt Flow Rate (at 230°C/2.16 kg)	ISO:1133	Lesser than 2g/10min	0.37g/10min	Complies
7.	Hydrostatic Strength i)Test at 20°C/1hr, 16 Mpa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
	ii)Test at 95°C/165 hrs , 3.8 Mpa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
8	Marking for Pipes & fittings	As per DIN 8077/8078, DIN16962		As per DIN 8077/8078, DIN16962	Complies

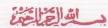
Remark: The above test results that submitted PPR pipe sample as tested Complies with DIN

16962 and DIN 8077/8078 for tested Parameter!

رئيس قسم المختبرات

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مسئول المختبر الفيزياني



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Directorate General of Commerce & Industry

Dhofar Governorate





وزارة التجارة والصناعة المديرية العامة للتجارة والصناعة دائرة المواصفات والمقاييس بمحافظة ظفار

#### **TEST REPORT OF PPR PIPES AND FITTINGS**

Laboratory No: PH/18-5	52/SLL	Date Report: 15-02-2018	
Sample Submitted By:	Sample drawn from 4 meter lot, at Eurotherm PPR Pipes And Fittings		
	Factory in Raysut Industrial Estate, by representative from DGSM. The		
	sample drawn was produced on 01/02/2018.		
Sample Description :	32MM DIA PN20 EUROTHERM PPR PIPE		
Standards Followed:	DIN 8077/8078 & DIN 16962.		
Raw Material Used:	PPR RA140E BOROUGE		
Analyst: Mr. Niyas M	usthafa	Date Of Test: 05/02/2018	
Blade - All II			

**Note:** All these tests are carried out in Eurotherm PPR Pipes And Fittings Factory Laboratory in Raysut, Salalah and were scrutinized by physical laboratory staff of the Department Of Standard and Metrology, Directorate General for Commerce & Industry Dhofar.

SL No	Name of the Test	Test standard	Specified Requirement	Results Obtained	Remark
1.	Surface Condition	DIN 8078	The Internal and external pipe surfaces shall be smooth.	Smooth	Complies
2.	Dimensions and Tolerances i) Outside diameter	DIN 8077	32.0– 32.3 mm	32.24 mm	Complies
	ii) Wall thickness	DIN 8077	5.4- 6.2 mm	5.48 mm	Complies
3.	Impact Strength Test (With 15J Pendulum)	DIN 8078	The failure rate of the test pieces shall not exceed 10%	Conforms	Complies
4.	Heat Reversion Test (at 135°C/120 min)	DIN 8078	Shall not exceed 2%	0.88 %	Complies
5.	Density	DIN 8078 ISO:1183	<0.91 g/cc	0.906 g/cc	Complies
6.	Melt Flow Rate (at 230°C/2.16 kg)	ISO:1133	Lesser than 2g/10min	0.53g/10min	Complies
7.	Hydrostatic Strength i)Test at 20°C/1hr, 16MPa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
	ii)Test at 95°C/165 hrs, 3.8 MPa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
8	Marking for Pipes & fittings	As per DIN 8077/8078, DIN16962		As per DIN 8077/8078, DIN16962	Complies

Remark: The above test results that submitted PPR pipe sample as tested Complies with DIN

16962 and DIN 8077/8078 for tested Parameter.



مسئول المختبر الفيزيائي

ص.ب: م ۲۹۹ - السر مسن البريدي: ۲۱۱ - تليفون: ۲۳۲۱۹۲۳۸ /۲۳۲۱۹۲۳۸ - فاكس: ۲۳۲۱۹۰۸۸ P.O.Box: 2995 - Postal Code 211 - Telephone 23219237 / 23219238 - Fax: 23219088



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#### **TEST REPORT OF PPR PIPES AND FITTINGS**

Laboratory No: PH/18-53/SLL

Sample Submitted By: Sample drawn from 4 meter lot, at Eurotherm PPR Pipes And Fittings
Factory in Raysut Industrial Estate, by representative from DGSM. The sample drawn was produced on 25/01/2018.

Sample Description: 40MM DIA PN20 EUROTHERM PPR PIPE
Standards Followed: DIN 8077/8078 & DIN 16962.

Raw Material Used: PPR RA140E BOROUGE

Analyst: Mr. Niyas Musthafa

Date Of Test: 05/02/2018

Note: All these tests are carried out in Eurotherm PPR Pipes And Fittings Factory Laboratory in Raysut, Salalah and were scrutinized by physical laboratory staff of the Department Of Standard and

Metrology, Directorate General for Commerce & Industry Dhofar.

SL No	Name of the Test	Test standard	Specified Requirement	Results Obtained	Remark
1.	Surface Condition	DIN 8078	The Internal and external pipe surfaces shall be smooth.	Smooth	Complies
2.	Dimensions and Tolerances i) Outside diameter	DIN 8077	40.0– 40.4 mm	40.1 mm	Complies
	ii) Wall thickness	DIN 8077	6.7 – 7.6 mm	7.05 mm	Complies
3.	Impact Strength Test (With 15J Pendulum)	DIN 8078	The failure rate of the test pieces shall not exceed 10%	Conforms	Complies
4.	Heat Reversion Test (at 135°C/120 min)	DIN 8078	Shall not exceed 2%	0.22 %	Complies
5.	Density	DIN 8078 ISO:1183	<0.91 g/cc	0.907 g/cc	Complies
6.	Melt Flow Rate (at 230°C/2.16 kg)	ISO:1133	Lesser than 2g/10min	0.48g/10min	Complies
7.	Hydrostatic Strength i)Test at 20°C/1hr,16MPa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
	ii)Test at 95°C/165 hrs, 3.8 MPa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
8	Marking for Pipes & fittings	As per DIN	8077/8078, DIN16962	As per DIN 8077/8078, DIN16962	Complies

Remark: The above test results that submitted PPR pipe sample as tested Complies with DIN

16962 and DIN 8077/8078 for tested Parameter.

رئيس قسم المختبرات

مسئول المختبر الفيزيائي

ر البريدي: ٢١١٠ - البرميز البريدي: ٢١١١ - تليفون: ٢٣٢١٩٢٣٨/ ٢٣٢١٩٢٣٨ - فاكس: ٢٣٢١٩٠٨٨ - كاكس: ٢٥٥. P.O.Box : 2995 - Postal Code 211 - Telephone 23219237 / 23219238 - Fax : 23219088



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### TEST REPORT OF PPR PIPES AND FITTINGS

Laboratory No: PH/18-54/SLL		Date Report: 15-02-2018	
Sample Submitted By:		ter lot, at Eurotherm PPR Pipes And Fittings	
	Factory in Raysut Industrial Estate, by representative from DGSM. The		
	sample drawn was produced on 20/01/2018.		
Sample Description :	50MM DIA PN20 EUROTHERM PPR PIPE		
Standards Followed:	DIN 8077/8078 & DIN 16962.		
Raw Material Used:	PPR RA140E BOROUGE		
Analyst: Mr. Niyas M	usthafa	Date Of Test: 05/02/2018	
Note: All these tests are carried out in Eurotherm PPR Pipes And Fittings Factory Laboratory			

**Note :**All these tests are carried out in Eurotherm PPR Pipes And Fittings Factory Laboratory in Raysut, Salalah and were scrutinized by physical laboratory staff of the Department Of Standard and Metrology, Directorate General for Commerce & Industry Dhofar.

SL No	Name of the Test	Test standard	Specified Requirement	Results Obtained	Remark
1.	Surface Condition	DIN 8078	The Internal and external pipe surfaces shall be smooth.	Smooth	Complies
2.	Dimensions and Tolerances i) Outside diameter	DIN 8077	50.0– 50.5 mm	50.26 mm	Complies
	ii) Wall thickness	DIN 8077	8.3-9.4 mm	8.54 mm	Complies
3.	Impact Strength Test (With 15J Pendulum)	DIN 8078	The failure rate of the test pieces shall not exceed 10%	Conforms	Complies
4.	Heat Reversion Test (at 135°C/120 min)	DIN 8078	Shall not exceed 2%	0.3 %	Complies
5.	Density	DIN 8078 ISO:1183	<0.91 g/cc	0.907 g/cc	Complies
6.	Melt Flow Rate (at 230°C/2.16 kg)	ISO:1133	Lesser than 2g/10min	0.39 g/10min	Complies
7.	Hydrostatic Strength i)Test at 20°C/1hr,16MPa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
	ii)Test at 95°C/165 hrs, 3.8 MPa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
8	Marking for Pipes & fittings	As per DIN 8077/8078, DIN16962		As per DIN 8077/8078, DIN16962	Complies

Remark: The above test results that submitted PPR pipe sample as tested Complies with DIN

ع منار: 16962 and DIN 8077/8078 for tested Parameter

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مسئول المختبر الفيزيائي

ص.ب: ٢٩٩٥ - السر مسن البريدي: ٢١١ - تليفون: ٢٣٢١٩٢٣٨/ ٢٣٢١٩٢٣٨ - فاكس : ٢٣٢١٩٠٨٨ P.O.Box : 2995 - Postal Code 211 - Telephone 23219237 / 23219238 - Fax : 23219088



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### **TEST REPORT OF PPR PIPES AND FITTINGS**

Laboratory No: PH/18-55/SLL Date Report : 15-02-2018 Sample Submitted By: Sample drawn from 4 meter lot, at Eurotherm PPR Pipes And Fittings Factory in Raysut Industrial Estate, by representative from DGSM. The sample drawn was produced on 16/01/2018. Sample Description: 63MM DIA PN20 EUROTHERM PPR PIPE Standards Followed: DIN 8077/8078 & DIN 16962. Raw Material Used: PPR RA140E BOROUGE Analyst: Mr. Niyas Musthafa Date Of Test: 05/02/2018

**Note:** All these tests are carried out in Eurotherm PPR Pipes And Fittings Factory Laboratory in Raysut, Salalah and were scrutinized by physical laboratory staff of the Department Of Standard and

Metrology, Directorate General for Commerce & Industry Dhofar.

SL No	Name of the Test	Test standard	Specified Requirement	Results Obtained	Remark
1.	Surface Condition	DIN 8078	The Internal and external pipe surfaces shall be smooth.	Smooth	Complies
2.	Dimensions and Tolerances i) Outside diameter	DIN 8077	63.0– 63.6 mm	63.1 mm	Complies
	ii) Wall thickness	DIN 8077	10.5– 11.7 mm	10.78 mm	Complies
3.	Impact Strength Test (With 15J Pendulum)	DIN 8078	The failure rate of the test pieces shall not exceed 10%	Conforms	Complies
4.	Heat Reversion Test (at 135°C/120 min)	DIN 8078	Shall not exceed 2%	0.11 %	Complies
5.	Density	DIN 8078 ISO:1183	<0.91 g/cc	0.907 g/cc	Complies
6.	Melt Flow Rate (at 230°C/2.16 kg)	ISO:1133	Lesser than 2g/10min	0.36g/10min	Complies
7.	Hydrostatic Strength i)Test at 20°C/1hr,16MPa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
	ii)Test at 95°C/165 hrs, 3.8 MPa	DIN 8077 DIN 8078	Shall not leak or failure during the test period	No leakage or failure	Complies
8	Marking for Pipes & fittings	As per DIN 8077/8078, DIN16962		As per DIN 8077/8078, DIN16962	Complies

Remark: The above test results that submitted PPR pipe sample as tested Complies with DIN

16962 and DIN 8077/8078 for tested Parameter.





مسئول المختبر الفيزيائي

ص.ب : ۲۹۹۰ - الـر مــز البريـدي : ۲۱۱ - تليفون : ۲۳۲۱۹۲۳۸ /۲۳۲۱۹۲۳۸ - فاكـس : ۲۳۲۱۹۰۸۸ P.O.Box : 2995 - Postal Code 211 - Telephone 23219237 / 23219238 - Fax : 23219088