

NELTEX

DEVELOPMENT CO., INC.

REF#: 2013-074

CERTIFICATION

This is to certify that **NELTEX Development Co. Inc.** is distributing **Neltex PPR PN20 pipes, with Blue Line and with Red Line**, with sizes 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm and 110mm.

Neltex PPR is supplied by **Borealis**, processed by **ERA** and certified by **Bodycote**.

Neltex PPR is inspected and tested in conformance to ISO 15874: Plastics Piping Systems for Hot and Cold Water Installations.

Prepared by:



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QA Supervisor

Approved by:



Armando H. Julva
QA/TS Manager

TECHNICAL SPECIFICATIONS

PRODUCT	Neltex PP-R PN 20
REFERENCE STANDARD	ISO 15874: Plastics Piping Systems for Hot and Cold Water Installations

A. DIMENSION

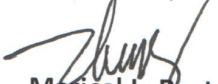
NOMINAL PIPE SIZE	OUTSIDE DIAMETER (mm)	WALL THICKNESS (mm)
20mm	20.0 – 20.3	3.4 – 3.9
25mm	25.0 – 25.3	4.2 – 4.8
32mm	32.0 – 32.3	5.4 – 6.1
40mm	40.0 – 40.4	6.7 – 7.5
50mm	50.0 – 50.5	8.3 – 9.3
63mm	63.0 – 63.6	10.5 – 11.7
75mm	75.0 – 75.7	12.5 – 13.9
90mm	90.0 – 90.9	15.0 – 16.7
110mm	110.0 – 111.0	18.3 – 20.3

B. PHYSICAL PROPERTIES

PROPERTY	STANDARD REQUIREMENT	TEST METHOD
Resistance to Internal Pressure (water-in-water)	No failure during the test period with the following hoop stress: a. 20C, 1hour, 16MPa b. 95C, 22hours, 4.3MPa c. 95C, 165hours, 3.8MPa d. 95C, 1000hours, 3.5MPa	EN 921:1994 Plastics piping systems - Thermoplastics pipes - Determination of resistance to internal pressure at constant temperature
Thermal stability by hydrostatic pressure testing (water-in-air)	No bursting during the test period: at 1.9MPa hoop stress, 110C, 8760 hours	EN 921:1994 Plastics piping systems - Thermoplastics pipes - Determination of resistance to internal pressure at constant temperature

PROPERTY	STANDARD REQUIREMENT		TEST METHOD
Longitudinal Reversion	wall thickness $\leq 8\text{mm}$	2% maximum after 1 hour at 135°C	EN 743:1994 Plastics piping and ducting systems – Thermoplastics pipes – Determination of the Longitudinal Reversion
	wall thickness $>8\text{mm}$ $\leq 16\text{mm}$	2% maximum after 2 hours at 135°C	
Impact Resistance	< 10% Breakage Rate of Tested Samples		ISO 9854 Thermoplastics pipes for the transport of fluids – Determination of pendulum impact strength by the Charpy method
Melt flow rate (pipe)	30% maximum difference compared with compound at 230C, 2.16kg		ISO 1133 Plastics – Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastics

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