



**CERTIFICATE
OF CONFORMITY**

No 07-HYPBCПCРБ-25.10



Issued according to Article 14, paragraph 1 and/or 2 of the Ordinance No ПД-02-20-1/05.02.2015 on the terms and conditions for use of construction products in the construction of the Republic of Bulgaria (HYPBCПCРБ) of the Ministry of Regional Development and Public Works for

**PLASTIC HIGH DENSITY POLYETHYLENE (PE-HD) PE100-RC PIPES,
compact (one layer), Type 1, FOR THE SUPPLY OF GASEOUS FUELS
trademark SafeLine
and**

**PLASTIC HIGH DENSITY POLYETHYLENE (PE-HD) PE100-RC PIPES,
two- and three co-extruded layers, Type 2
FOR THE SUPPLY OF GASEOUS FUELS,
trademark SafeLine**

Dimension groups: 1) $d_n < 75\text{mm}$; 2) $75\text{ mm} \leq d_n < 250\text{ mm}$; 3) $250 \leq d_n < 710\text{ mm}$

**Pipe range, working pressure and dimensions according to Annex 1 of this certificate
and declared characteristics according to Annex II of this certificate.**

placed on the market by

PLASTEC OOD

14 Woodrow Wilson Str., Plovdiv, Bulgaria

and produced at

the factory of **PLASTEC OOD**

14 Woodrow Wilson Str., Plovdiv, Bulgaria

This certificate attests that the products have been assessed according to

BDS EN 1555-1:2021, BDS EN 1555-2:2021 and

BDS EN 1555-1:2021/NA:2024, BDS EN 1555-2:2021/NA:2022

and they meet the national requirements set out in

Order No ПД-02-14-1329 of 03.12.2015

of the Minister of Regional Development and Public Works, Items 4 and 5 of Annex 2 to Clause 2.

This certificate is first issued on 29th August 2025 and will remain valid to 28th August 2026 provided that the manufacturer ensures the consistency of characteristics of the products and that the conditions of the production and production control are not significantly modified.

Head of the CAB

Res.Ass. Eng. Victoria Vassileva PhD

General Manager of NISI Ltd

Maya Koseva



Sofia, 29th August 2025

This Certificate includes two Annexes of a total 2 pages which are an integral part of it.



RANGE, WORKING PRESSURE AND DIMENSIONS of PLASTIC PIPES
of high density polyethylene (PE-HD) PE100-RC for the supply of gaseous fuels
(one layer - Type 1 / two- and three co-extruded layers – Type 2)
trademark **SafeLine**, produced by **PLASTEC OOD**, included in the scope of the certificate

COMPACT (ONE LAYER) PIPES - Type 1

Type pipes	Pipe series		Maximum operating pressure MOP (bar)	Nominal diameter (mm)
	SDR	Design coefficient C		
Pipe of PE-HD (PE100-RC)	17	$\geq 2,0$	6	16, 20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630
	11	$\geq 2,0$	10	16, 20, 25, 32, 40, 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630

TWO- and THREE CO-EXTRUDED LAYERS PIPES - Type 2

Type pipes	Pipe series		Maximum operating pressure MOP (bar)	Nominal diameter (mm)
	SDR	Design coefficient C		
Pipe of PE-HD (PE100-RC)	17	$\geq 2,0$	6	160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630
	11	$\geq 2,0$	10	315, 355, 400, 450, 500, 560, 630

continued



DECLARED PERFORMANCE

of **PLASTIC PIPES** of **high density polyethylene (PE-HD) PE100-RC** for the supply of gaseous fuels
 (one layer - Type 1 / two- and three co-extruded layers – Type 2)
 trademark **SafeLine**, produced by **PLASTEC**, included in the scope of the certificate
 in accordance with **BDS EN 1555-2:2021/NA:2022**

Characteristic	Test method	Performance		
		Dimension group 1 $d_n < 75$ mm	Dimension group 2 $75 \leq d_n < 250$ mm	Dimension group 3 $250 \leq d_n < 710$ mm
Appearance, color	No	Black with orange stripes	Black with orange stripes	Black with orange stripes
Geometrical characteristics, mm	BDS EN ISO 3126	Conform to the threshold levels according to Tables 1, 2 and 3 of BDS EN 1555-2	Conform to the threshold levels according to Tables 1, 2 and 3 of BDS EN 1555-2	Conform to the threshold levels according to Tables 1, 2 and 3 of BDS EN 1555-2
Hydrostatic strength (80°C, 165 hours)	BDS EN ISO 1167-1 BDS EN ISO 1167-2	No failure	No failure	No failure
Elongation at break, %	BDS EN ISO 6259-1 BDS EN ISO 6259-3	≥ 350	≥ 350	≥ 350
Resistance to slow crack growth for PE 100-RC Cracked Round Bar test (CRB), number of cycles	BDS EN ISO 13489	$\geq 1,5 \times 10^6$	$\geq 1,5 \times 10^6$	$\geq 1,5 \times 10^6$
Resistance to slow crack growth for PE 100-RC Accelerated Notched Pipe test (ANPT), h	BDS EN ISO 13479	No failure during the test period	No failure during the test period	No failure during the test period
Resistance to rapid crack propagation * (RCP) (Critical pressure, p_c) bar	BDS EN ISO 13477	NPD	NPD	NPD
Oxidation induction time (thermal stability), min	BDS EN ISO 11357-6	> 20	> 20	> 20
Melt mass-flow rate compound, by mass g/10 min	BDS EN ISO 1133-1	$0,2 \leq MFR \leq 1,4$	$0,2 \leq MFR \leq 1,4$	$0,2 \leq MFR \leq 1,4$
Melt mass-flow rate, by mass g/10 min	BDS EN ISO 1133-1	$\pm 20\%$ deviation from the measured values of the raw material batch and the pipe (including for each layer in co-extruded pipes)	$\pm 20\%$ deviation from the measured values of the raw material batch and the pipe (including for each layer in co-extruded pipes)	$\pm 20\%$ deviation from the measured values of the raw material batch and the pipe (including for each layer in co-extruded pipes)
Longitudinal reversion (for pipes with wall thickness ≤ 16 mm), %	BDS EN ISO 2505	≤ 3	≤ 3	≤ 3
Additional requirements for pipes with co-extruded layers				
Integrity of the structure	BDS EN ISO 13968	$> 80\%$ of the initial stiffness value	$> 80\%$ of the initial stiffness value	$> 80\%$ of the initial stiffness value
Reaction to fire**	BDS EN 13501-1	NPD	NPD	NPD

* The characteristic is required for pipes with wall thickness $\geq$ wall thickness base pipe/pipe by manufacture compound.

** The characteristic is required for pipes for industrial sewerage systems for disposal of waste water, containing flammable or combustible liquids

Head of the CAB
 Res. Assoc. Eng. Victoria Vassileva Ph.D.

General Manager of NISI Ltd
 Maya Koseva

