

HIPLEX[®] TR-455 black

DESCRIPTION:

HIPLEX[®] TR-455 black is high density polyethylene, high molecular weight, specially designed for pressure pipe manufacture. This black compound combines easy processing with very good mechanical properties, an excellent resistance to UV radiation and thermal ageing, and very high environmental stress cracking resistance, which gives pipes a maximum useful life.

HIPLEX[®] TR-455 black contains 2.25% carbon black.

PROCESSING RECOMMENDATIONS:

Processing temperature: 190 – 220 °C for extrusion

PROPERTIES:

PROPERTY	TEST METHOD	UNIT	NOMINAL VALUE
MELT FLOW RATE	SRPS ISO 1133 condition T (ISO 1133 190 °C, 5 kg)	g/10 min	0.50
DENSITY	SRPS G.S2.510 method D (ISO 1183)	kg/m ³	955
CARBON BLACK CONTENT	SRPS ISO 6964 (ISO 6964)	%	2.25
CARBON BLACK DISPERSION	SRPS ISO 11420 (ISO 11420)	-	max. 3
TERMAL STABILITY	SRPS G.1. 603 (ISO 10837, OIT, 200°C)	minute	45
VOLATILE CONTENT	ISO 4437	%	0.02
TENSILE STRENGTH AT BREAK	SRPS G.S2. 612 (ISO 527)	MPa	30
TENSILE STRENGTH AT YIELD	SRPS G.S2. 612 (ISO 527)	MPa	19
ELONGATION AT BREAK	SRPS G.S2. 612 (ISO 527)	%	800
SHARPY IMPACT PROPERTY	SRPS/ISO 179 (ISO 179)	kJ/m ²	15
SHORE D HARDNESS	SRPS/ISO 868 (ISO 868)	Shore D	62
VICAT SOFTENING POINT	SRPS/ISO 306 (ISO 306)	°C	121
ESC RESISTANCE , F ₅₀	SRPS G.S2. 623 condition B (ASTM D 1693, B, F ₅₀ .)	h	2000
FLEXURAL MODULUS	SRPS G.S2. 614 (ISO 178)	MPa	800

SRPS – national standard

The values in this review are characteristic and are provided for guidance purposes only.



APPLICATION:

HIPLEX® TR-455 black is recommended for pipe extrusion, especially high-pressure pipe systems such as gas distribution systems, potable water pipes, industrial pipes etc.

HIPLEX® TR-455 black is classified as an MRS 8 material. It confirms different national and international standards such as ISO 4427, ISO 4437, EN 1555 and EN 12201.

HIPLEX® TR-455 black has *Health Certificate* issued by Institute for Health Protection of Serbia. Also, **HIPLEX® TR-455 black** has *Statement of Conformity*, which declares product's conformity with the European norms for materials intended to come into contact with foodstuffs. *Statement of Conformity* is issued by Institute for Public Health, Maribor, Slovenia.

STORAGE:

Polymer pellets are packed in LDPE bags, each bag weighs 25 kg. Bags are arranged on pallets and wrapped in stretch foil. One pallet has total polymer weight of 1250 kg.

Polyethylene is combustible material, therefore fire prevention measures in warehouses should be applied. Keep the polymer protected from harmful influences of heat, direct sunlight and high atmospheric humidity during storage.

If resin is stored under unfavourable conditions of large fluctuation in ambient temperature and atmospheric humidity, atmospheric moisture can condense inside the packaging. In such case, it is recommended to dry pellets before use.

The producer has no responsibility for any damage caused with the inappropriate storage.

REACH:

„HIP-Petrohemija“ a.d., Pancevo, Serbia, with applying the existing standards ISO 9001:2008 and ISO 14001:2004, follows completely the highest standards by which there are regulated human health and safety protection and environmental protection and herewith it expresses its intention to meet all the requirements which are prescribed by REACH regulation.

Pre-registration of all the substances of potential export interest has been made with European Agency for Chemicals in Helsinki, in accordance with the prescribed deadlines, therefore in this way it enables further undisturbed placement and sale of „HIP-Petrohemija“ a.d. products without any limits at EU Market.

As the only representative for „HIP-Petrohemija“ a.d. in EU, pursuant to Article 8 of REACH regulation, there has been designated **ReachLaw Ltd., Helsinki, Finland.**

RECYCLING:

Polyethylene is a material suitable for recycling.

The waste, that could appear during processing, should be kept clean before new usage through direct recycling.

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