



PETROHEMIJA

## HIPREN<sup>®</sup> EM 1500 T

### DESCRIPTION:

HIPREN<sup>®</sup> EM 1500 T is produced by cold copolymerisation process, with the use of rosin acids soaps as emulsifiers, and contains 23.5% styrene bounded in polymer. The rubber is stabilised with staining antioxidant added during the production process. HIPREN<sup>®</sup> EM 1500 T is dark coloured, without nitrosoamine.

HIPREN<sup>®</sup> EM 1500 T is compatible with natural rubber and other synthetic rubbers. Good compatibility, easy incorporation of various compounding ingredients provide possibility of mixing formulations for different applications requirement.

### PROPERTIES:

PROPERTY	TEST METHOD	UNIT	NOMINAL VALUE	TOLERANCES
Mooney viscosity ML 1 + 4 / 100°C	ASTM D1646	MJ	51	46-56
Bound styrene	ASTM D5775	wt. %	23.5	22.0 - 25.0
Ash	ASTM D5667	wt. %	0.40	max. 0.75
Soap	ASTM D5774	wt. %	0.50	max. 0.75
Organic acid	ASTM D5774	wt. %	6.0	5.0 -7.0
Volatile matter	ASTM D5668	wt. %	0.5	max. 0.75
Stabilizer N-(1,3-dimethylbutyl)-N-phenyl-p-phenylenediamine)	Internal (10.4.2.1)	wt. %	0.22	< 0.25
Stabilizer 4,6-bis(octylthiomethyl)-o-cresol	Internal (10.4.2.2 E)	wt. %	0.12	min. 0.10

### TYPICAL VULCANIZATION PROPERTIES

Standard test recipe : ASTM D3185; Mixing procedure : ASTM D3182; Carbon black : IRB 9  
Curemeter test: Rheometer MDR 2000 ; Conditions: Temperature 160°C, Arc 0.5°

PROPERTY	TEST METHOD	UNIT	RANGE OF STANDARD VALUES
Min. torque ( $M_L$ )	ASTM D5289	dNm	1.9 - 2.9
Max. torque ( $M_H$ )	ASTM D5289	dNm	18.5 - 22.5
Scorch time ( $t_{s1}$ )	ASTM D5289	min	3.2 - 5.2
50% Cure time ( $t_{50\%}$ )	ASTM D5289	min	9.0 - 13.0
90% Cure time ( $t_{90\%}$ )	ASTM D5289	min	16.5 - 21.5

### VULCANIZED RUBBER PROPERTIES:

Conditions:

Vulcanization temperature 145°C

Vulcanization time 35 min

Test specimen S1

PROPERTY	TEST METHOD	UNIT	RANGE OF STANDARD VALUES
Tensile strenght at break	ASTM D412	MPa	min. 22.0
Elongation at break	ASTM D412	%	min. 400
Modulus 300%	ASTM D412	MPa	9.5 - 14.5
Rebound resilience *	ASTM D7121	%	min 40
Hardness*	ASTM D2240	°ShA	61 - 69

\* parameters that are not written in the certificate

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**APPLICATION:**

**HIPREN<sup>®</sup> EM 1500 T** is used for production of wide range products including simple small rubber parts, moulded and pressed products, light pneumatics and heavy conveyer belts, hoses, tires etc.

**HIPREN<sup>®</sup> EM 1500 T** has Health Certificate issued by National Laboratory of Health, Environment and Food, Maribor, Slovenia.

**PACKAGING AND STORAGE:**

**HIPREN<sup>®</sup> EM 1500 T** has a form of bales  $30.00 \pm 0.50$  kg each. Bales are wrapped in PE film and the rubber can be processed together with the packaging film. The bales are laid into wooden boxes, covered inside with cardboard and polyethylene sack, which protect bales in the box. One box contains 30 bales, total box weighs app. 900 kg.

Packaging of bales in metal boxes is also available. Bales are wrapped in a PE film foil and they can be processed together with it. The bales are laid into metal box-pallets which are covered inside polyethylene bag, which protects bales in the box. One box contains 33 or 40 bales with total polymer weight of 990 or 1200 kg respectively.

The packed rubber is protected against contamination and atmospheric moisture. It is supposed to be stored in dry place on temperatures below 30°C and not exposed to direct sunlight. The product shall retain its properties for not longer than two years provided these conditions are fulfilled at any time during this period.

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

**REACH:**

HIP-Petrohemija with applying the existing standards ISO 9001, ISO 14001, ISO 45001 and ISO 50001, follows completely the highest standards by which there are regulated environmental protection, human health and safety protection and herewith it expresses its intention to meet all the requirements which are prescribed by REACH regulation.

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's products without any limits at EU Market.

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

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

**CONTACT:**

**Sale:**

**T:** +381 13 307 216

**F:** +381 13 345 945

**E:** sbr.sales@hip-petrohemija.rs

**Technical information:**

**T:** +381 23 758 799

**F:** +381 23 737 806

**E:** fsk@hip-petrohemija.rs