## TECHNICAL SPECIFICATION Last revision date: 27.12.2021

## NEODYMIUM BUTADIENE RUBBER (BR) GRADES BR-544, BR-563

Chemical

name:

Neodymium butadiene rubber (BR) grades BR-544, BR-563 is a product of 1,3-butadiene polymerization in aliphatic hydrocarbons medium over neodymium compounds based catalyst system.

НИЖНЕКАМСКНЕФТЕХИМ

Application: manufacture of tires and rubber goods and other sectors of national economy (including conveyor belts, V-belts, shoe soles).

## mium compounds based Empirical formula: ad rubber goods and other cluding conveyor belts, Standard specification:

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cis-1,4-polybutadiene

(- CH<sub>2</sub>CH=CHCH<sub>2</sub> -) n

## **Product Characteristics**

Property	Values by grade		Tost Mothoda
	<b>BR-544</b>	<b>BR-563</b>	Test Methods
1. Mooney Viscosity ML 1+4 (100 °C), MU, within	40-49	60-70	para 4.2 of TU or ASTM D 1646
2. Viscosity spread in a lot Mooney, MU, max	6		para 4.2 of TU
3. Loss on drying, wt %, max	0.50		para 4.3 of TU or ASTM D 5668
4. Non-staining antioxidant, wt %, min	0.20		para 4.4 of TU
5. Ash, wt %, max	0.50		para 4.5 of TU or ASTM D 5667
6. 1.4-cis units, wt %, min	96		para 4.6 of TU or
			para 4.7 of TU
7. Curing characteristics, within:	Not rated, determination is mandatory		para 4.8 of TU
- minimum torque M <sub>L</sub> , dNm			
- maximum torque, M <sub>H</sub> , dNm			
- time to cure start, $t_{S1}$ , minutes			
- time to 50% cure, t'(50) minutes			
- time to 90% cure, t'(90) minutes			

Product form:	$30 \pm 1$ kg bales	
Packaging:	Bales are wrapped in PE film or EVA film.	
	Wrapped briquettes are packed in box pallets:	
	- polymer container;	
	- metal containers of type MV-5 (or its analogs).	
	Pallet box internal surface is covered with PE film or PE bag (liner) to protect from	
	contamination; after loading the box is closed and wrapped with belt. Two shipping	
	labels are applied to each pallet box.	
Transportation:	All types of transport in accordance with the applicable shipping rules.	
Storage:	Rubber packed in:	
	- polymer containers are stored in stacks of no more than 3 deck in height;	
	- metal containers are stored in stacks up to 5 deck in height;	
	Packaged rubber is stored in the warehouse of the manufacturer or consumer in	
	places protected from direct sunlight, atmospheric precipitation and pollution.	
	Guarantee shelf life - 2 year from the date of production.	

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