SYNTION® 2150X4  Technical Data Sheet
Styrene-Butadiene Rubber - SSBR

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Approved by: Krzysztof Marusza, Product Manager
Previous editions of this document have lost their validity.

CHARACTERISTICS
SYNTION® 2150X4 is a functionalized grade of high-vinyl, solution styrene-butadiene rubber, dry type. It is produced by a technology of anionic copolymerization, based on lithium catalyst, partly coupled with Si compound. Contains 21% of chemically bonded styrene and is stabilized with a non-staining antioxidant.

GENERAL REQUIREMENTS
Bales of synthetic rubber SYNTION® 2150X4 should be close to dimensions 700X460x180 mm. Presence of any mechanical impurities is not permitted.

TECHNICAL PARAMETERS

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Values</th>
<th>Test methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mooney viscosity ML 1+4 (100°C) – unmassed</td>
<td>°ML</td>
<td>60 – 70</td>
<td>ASTM D1646</td>
</tr>
<tr>
<td>Volatile matters</td>
<td>% wt.</td>
<td>max. 0,75</td>
<td>ASTM D5668</td>
</tr>
<tr>
<td>Bound styrene</td>
<td>% wt.</td>
<td>19,5 – 22,5</td>
<td>Own method</td>
</tr>
<tr>
<td>1,2-butadiene structure (vinyl) content (on polymer)</td>
<td>% wt.</td>
<td>48,0 – 52,0</td>
<td>Own method</td>
</tr>
</tbody>
</table>

Guaranteed values of relevant technical parameters of the product are each time agreed upon in the sales contract.
To each shipping lot/delivery a quality certificate including data on properties of the product determined during release control is issued. Scope of the testing which is covered by the quality certificate is each time agreed upon in the sales contract.

PACKAGING
SYNTION® is baled to form of rubber blocks weighing 33 kg (± 1,0 kg) and measuring 700 x 360 x 180 mm. Each block is wrapped in PE film, which is assigned a specific colour relating to the respective rubber grade.
The blocks are laid into returnable metal boxes. Net weight of each complete box is about 1200 kg.
Alternatively it is possible supply product in wooden boxes, net weight of each complete box is about 1000 kg.
In case of wooden 1000 kg boxes storage of the product in two (2) or more layers (stacking) is not permitted.
A self-adhesive label is fixed to each box and displays the following data: name of the producer, name of the product and designation of type, batch number, number of the palette, gross and net weight, date of manufacture.

TRANSPORTATION
SYNTION® is typically transported in covered road trucks, in covered railway carriages and in standard shipping containers.
SYNTION® 2150X4 is not a dangerous material to transport.

STORAGE
Product should be stored in sheltered conditions away from direct sunlight, at least 2 meters away from radiant heating elements and the temperature should not exceed 30°C. The guaranteed shelf life for SYNTION® under the above-mentioned conditions is twelve (12) months from the date of production.
APPLICATION

SYNTION® 2150X4 is appropriate for silica filled rubber compounds used in the production of very low rolling resistance car tyre treads, having improved wet grip and wear resistance.

It does not contain any substances preventing its usage for making the articles coming into contact with foods or drinking water.

This document is of an informative character. The information given herein is based on the present state of our knowledge and experience. It makes neither product properties nor qualitative parameters guarantee and cannot be used as a basis of any claims. The information provided cannot be used for any mixtures with any other substances. Product should be transported, stored and used in accordance with valid regulations and good occupational hygiene practice.

Making use of the information as well as product application is beyond the producer control and determination of the safe conditions of use is the sole responsibility of a customer.