

## KER<sup>®</sup> 1904

### High Styrene Rubber (HSR)

#### CHARACTERISTICS

KER<sup>®</sup> 1904 is a type of high-styrene rubber. It is produced by mixing styrene-butadiene latex and high styrene resin in adequate proportion. It is coagulated by a system of acid and synthetic coagulant, stabilized with a non-staining antioxidant and contains abt. 68% of bonded styrene

KER<sup>®</sup> 1904 is also available as bio/circular attributed HSR under ISCC Plus certification.

#### CHEMICAL AND PHYSICAL DATA

| PROPERTY         | TEST METHOD | UNIT  | VALUE     |
|------------------|-------------|-------|-----------|
| Volatile matters | ASTM D5668  | % wt. | max. 1,0  |
| Total Ash        | ASTM D5667  | % wt. | max. 0,4  |
| Organic acids    | ASTM D5774  | % wt. | 5,0 ÷ 7,0 |
| Soaps            | ASTM D5774  | % wt. | max. 0,4  |

#### VULCANIZATE TECHNICAL PROPERTIES

| PROPERTY         | TEST METHOD | UNIT  | VALUE     |
|------------------|-------------|-------|-----------|
| Tensile strength | ASTM D412   | MPa   | min. 16,7 |
| Hardness         | ASTM D2240  | °Sh D | 56 ÷ 64   |

#### STANDARD RUBBER COMPUND COMPOSITION

| COMPONENT      | UNIT            | VALUE |
|----------------|-----------------|-------|
| Rubber         | parts by weight | 100   |
| Zinc white     | parts by weight | 5,00  |
| Stearin        | parts by weight | 1,00  |
| Sulhur         | parts by weight | 2,00  |
| DM accelerator | parts by weight | 1,60  |
| D accelerator  | parts by weight | 0,40  |

#### APPLICATION

KER<sup>®</sup> 1904 is suitable for rubber compounds used in the production of floor coverings, cables, toys and micro porous rubber for the footwear industry. The addition of this product reduces the plasticity of the rubber compound and increases the hardness of the vulcanizate.

It is approved for the production of rubber articles that come into contact with food or drinking water.

#### PACKAGING

- KER<sup>®</sup> 1904 is supplied in the form of granules, packed into PE bags with a nominal weight of 25 kg (± 0,5 kg).
- The bags are placed on a wooden pallet. The net weight of each complete pallet is about 1200 kg.
- Alternatively, it is possible to deliver the product in road tankers.

## TRANSPORTATION AND STORAGE

KER® 1904 is typically transported in covered road trucks, in covered railway carriages in standard shipping containers or in road tankers. KER® 1904 should be stored in sheltered conditions away from direct sun light, an adequately ventilated area and at least 2 meters away from radiant heating elements where it should not exceed temperatures above 30°C. In case of bulk delivery, rubber must be stored in the silo equipped with air pressure ventilation system allowing to blow the air through whole rubber volume. Under these conditions KER® 1904 has a shelf life of at least 12 months.

None of the companies belonging to Synthos Group (Synthos) make warranties, either express or implied, in this document; all implied warranties of merchantability or fitness for a particular purpose are expressly excluded. Since the conditions and methods of use of the information and products referred to are beyond Synthos' knowledge and control, Synthos disclaims any and all liability for losses or damages that may result from reliance on the information or use of the products described herein. Synthos makes no warranties, express or implied, that the use of any Synthos product will be free from any infringement claims.

Date of edition:

02/11/2023

[synthosgroup.com](http://synthosgroup.com)

