

General Material Specification

VESTENAMER® 8012

1. General characteristics

VESTENAMER 8012 is a partly crystalline *trans*-Polyoctenamer-Rubber (TOR) with high trans-content (>80%), suitable as processing aid for rubber compounds. The used stabilizer is a non-staining, sterically hindered phenol.

2. Form of delivery

VESTENAMER 8012 is supplied as cylindrical or lenticular granules (< 6 mm)

3. Specification

Property	Test method	Unit	Value	Test frequency ^{*)}
Viscosity number	ISO 1628-1	ml/g	110 - 130	1
Melting range (DSC 2 nd heating)	ISO 11357	° C	50 – 58	1
Volatile Matter (1 h at 105 °C)	ISO 248 / ASTM D5668	%	0.5 max.	1
Ash content	DIN EN ISO 3451	%	0.1 max.	0
Density	ISO 1183	g/cm ³	0.89 – 0.93	0

*) 1 = Each lot
 0 = Typical value, not part of lot testing plan

4. Description of Non-Standardized Test Methods

a) Viscosity Number J

The Viscosity Number J is determined according to ISO 1628-1 with the following test conditions:

1. Toluene is used as solvent
2. The concentration of the solution is 5 ± 0.005 g/l
3. VESTENAMER is dissolved within 2 hours at 50 ± 5 °C
4. The measurement is conducted with the cooled-off solution at 25 °C.

b) Melting Point $T_m(2)$

The melting point is determined in a DSC (Differential Scanning Calorimetry) equipment acc. to ISO 11357. For this purpose the sample (about 3 to 6 mg) is placed in a non-hermetically closed aluminum pan. The sample is then pre-conditioned by heating it from room temperature to +100 °C at a heating rate of 20 K/min, holding at +100 °C for 1.5 minutes, cooling down at the same rate to -75 °C, and holding at this temperature for 8 minutes. After this the measurement is started. The sample is heated again with the heating rate of 20 K/min to +100 °C, and the DSC-curve is registered. The peak maximum found upon this re-heating (second melting) is defined as the melting point. This way identical pretreatment of the samples and, consequently, reproducible results are ensured.

5. Packaging and labeling

The material will be delivered in gusseted PE sacks with a net weight of 25 kg (55 lbs). 50 bags will be stacked on a one-way pallet. The bags are labeled as follows

- Supplier's name
- Trade name and grade
- Lot number ("Partie-Nr.")
- Month and year of production

6. Test report

Upon request, a specific test report according to DIN EN 10204-3.1 will be supplied for each delivery of material stating the following test results:

- Viscosity Number J according to ISO 1628-1
- Melting range (DSC 2.nd heating) according to ISO 11357
- Volatile matters according to ISO 248/ ASTM D5668

However, this test report does not relieve the customer of his obligation to inspect the goods upon receipt.

7. Safety data sheet

The product is classified as not hazardous in the sense of the "Gefahrstoffverordnung" (GefStoffV = regulation on dangerous substances). Upon request, a safety data sheet according to §14 GefStoffV will be made available.

8. Shelf life

The material can be stored after production for at least 5 years at temperatures up to 30 °C, if stored carefully and protected against sunlight.

9. Modifications of the material

The customer will be informed immediately about any changes or modifications of the composition of the material as far as these have any influence on quality or specification of the product.

10. Rejections, complaints

Material supplied that does not conform to the conditions mentioned above may be rejected. Complaints will be dealt within a 3 week period, otherwise an immediate reply will be given.

11. Quality assurance

The quality management system of the Evonik Degussa GmbH is based on ISO / TS 16949. The main objective is to meet all requirements of our customer in respect of product quality and customer service. Upon request, further information about the quality assurance of Evonik Degussa GmbH will be made available.

This material specification has been prepared with care and to the best of our knowledge. It does not establish any warranties to third parties, to whom it might be passed on. No additional warranty of any kind, expressed or implied, is linked thereby. Furthermore, the General Sales Conditions of Evonik Degussa GmbH will apply.

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