

Technical Data Sheet- EPDM 43 Rubber Compound – R243OF1

1. Introduction

The EPDM 43 – R243OF1 – rubber compound is a synthetic elastomer based on ethylene-propylene-diene for industrial use. This compound is a common base material for rubber bellows, seals and vibration dampers.

2. Product Description

- Chemical Composition: Ethylene-propylene-diene
- Delivery Form: Sheets, continuous strip
- Color: Black
- Storage Lifetime: 5 years (for vulcanized product)
- Rubber–Metal Bonding: Poor (weak)

3. Physical Properties

Property	Standard	Measured values
Hardness	ISO 48 Method M	43 ± 5 SH A
Density	ISO 2781	g/cm ³
Tensile strength	ISO 37	MPa
Elongation	ISO 37	%
Permanent deformation 22h / 100°C	ISO 815	% max.
Ageing, 70h / 100°C	ISO 188	
Hardness change		+1 SH A
Mass change		-x %

4. Heat Resistance

-40 – +100°C

5. Resistance to Chemicals

Chemical	Resistance
Alcohol	Moderate
Mineral oils	Poor
Ethers	Good
Ketones	Good
Air/Oxygen	Good
Alkalis	Good
Vegetable oils	Poor
Ozone resistance	Excelent
Inorganic acids	Good
Organic acids	Good
Silicone oil	Poor
Fats	Poor

6. Advantages

- The EPDM rubber exhibits moderate elasticity, moderate tensile strength, and good tear strength.
- Compared to natural rubber compounds, it has higher temperature tolerance.
- Its weather resistance (including ozone, UV, aging) is good, making it a common choice for parts exposed to the elements

7. Disadvantages

- Weak metal bonding (rubber-to-metal adhesion is poor)
- High permanent deformation is possible under load
- Difficult mixing (especially on calender or roll mills)
- Poor oil resistance
- Poor adhesion at low temperatures; makes downstream processing and fabrication more challenging

These data are, to the best of our knowledge, accurate as of the date indicated. The above information has been obtained from appropriate laboratory tests and is considered reliable, but we do not guarantee that the values can be reproduced in other laboratories.

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