PHE Gaskets

SILICONE - VMQ

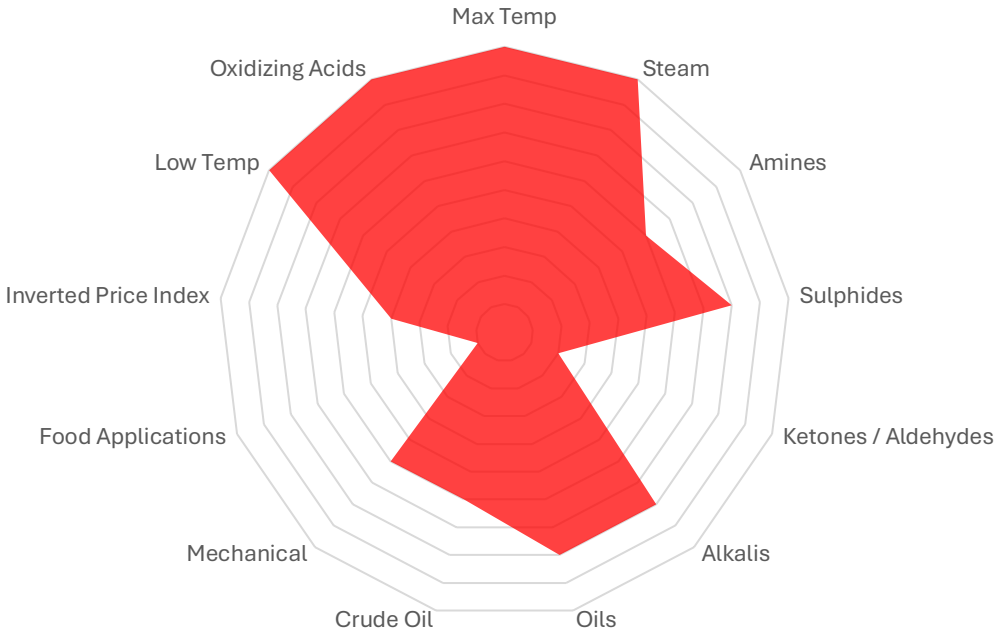
PHE VMQ Silicone is a peroxide cured silicone polymer. It has excellent resistance to both low and high temperatures, and will not degrade in the presence of steam. The PHE VMQ has a low compression set, which helps maintain strength and flexibility over extended time periods. It is compounded to the requirements of FDA section 177.2600 (e &f) for rubber materials in food contact & EC 1935/2004.

Typical Applications

Refrigerant Ammonia
Animal and Vegetable Oils
High and Low Temperatures
Pharmaceuticals
Ozone Resistant

Properties

Hardness 76 Shore A
Tensile Strength 7 MPa
200% Elongation at Break
Max Continuous Temp 250°C
Min Continuous Temp -60°C



Note: The greater the distance from center, the better the suited the material is for against the application. This is a generalized overview. For specific applications, please contact PHE Gaskets for consult.

MATERIAL DATA SHEET (MDS)

PRODUCT: PHE VMQ - Silicone gaskets Edition 2026, Rev.1

1. IDENTIFICATION OF SUBSTANCE AND OF THE COMPANY

Issued by: Bailey French, PHE Gaskets Incorporated, Knoxville, Tennessee 37917
Country: USA
Phone no: +1 (865) 249-7773
E-mail address: bfrench@phegaskets.com
Trade name: PHE VMQ - Silicone Article numbers: 6th and 7th digit = 45 (x x x x x 45)
Color Identification: Black rubber gasket with one red dot.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition: Peroxide cured VMQ, carbon black, softener, curatives, and antioxidants and processing aids.

3. HAZARD IDENTIFICATION

General Information: Non-labeled product according to US/EU-regulations.
Special attention should be paid to the following areas:
* Particles can cause damage or irritation on the eye surface.
* Sensitive persons can obtain skin irritation by unprotected handling of the product

4. FIRST-AID MEASURES

Emergency first aid procedures: Eye contact: Flush with water, consult physician. Skin contact: Wash with soap and water. Ingestion: As with swallowing any foreign substance, consult physician.

5. FIRE FIGHTING MEASURES

The material consists of organic raw materials known to be flammable. In case of fire, follow the instructions given by appropriate firefighting authorities. Flammable/Combustible: Yes, at very high temperatures far above 200°C, in presence of an ignition source. Extinguishing Media: Water spray, high expansion foam or powder. Special firefighting instructions: Treat as hydrocarbon fire. Main hazardous combustion products: Carbon dioxide, carbon monoxide, nitrogen oxides, hydrocarbons (alcohols, aldehydes, ketones)

6. ACCIDENTAL RELEASE MEASURES

Waste disposal methods: Dispose of in accordance with local, state and federal regulations

7. HANDLING AND STORAGE

Treat as normal rubber products.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection: Only when buffing or at temperatures above 100°C. Protective gloves: Not normally required at normal use (unless person is especially sensitive to the product) Eye protection: As required Hygienic work practices: Industrial hygiene and safety practices should be observed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid Odor: Very low Appearance: Black material with two green dots Specific gravity: 1.59-1.61 g/ml Free monomers: Traces Melting point: Not applicable

10. STABILITY AND REACTIVITY

Chemical stable: Yes
Hazardous polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

Could cause skin irritation, or allergy, for some very sensitive persons.

12. ECOLOGICAL INFORMATION

General Information: The products are very resistant to biodegradability, and not known to be eco-toxic.

13. DISPOSAL CONSIDERATIONS

The products may be disposed as land filling, or be burned like other rubber or plastic products.

14. TRANSPORT INFORMATION

No special precautions are necessary when transporting the product.

15. REGULATORY INFORMATION

No labels are needed. See local and federal regulations.

16. OTHER INFORMATION

The product is cured rubber. When exposed to higher temperatures, the lifetime of the product will decrease.