

## Performance parameters of FVMQ

| NO. | Item                                                                             |                                                                                         | Index    | Test method           |         |       |       |
|-----|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------|-----------------------|---------|-------|-------|
|     |                                                                                  |                                                                                         |          | GB                    | ISO     | ASTM  | DIN   |
| 1   | Color                                                                            |                                                                                         | blue     | /                     | /       | /     | /     |
| 2   | Shore hardness,ShA                                                               |                                                                                         | 70±5     | GB/T531.1             | 7619-1  | D2240 | 53505 |
| 3   | Brittleness temperature,°C                                                       |                                                                                         | ≤-60     | GB/T1682              | 812     | D2137 | 53546 |
| 4   | Tensile strength,MPa                                                             |                                                                                         | ≥ 7.0    | GB/T528               | 37      | D412  | 53504 |
| 5   | Elongation at failure,%                                                          |                                                                                         | ≥200     |                       |         |       |       |
| 6   | Tear strength,kN/m                                                               |                                                                                         | ≥15.0    | GB/T529               | 34      | D624B | 53506 |
| 7☆  | Hot air compression set<br>(compression 25%,125°C,24h),%                         |                                                                                         | ≤15.0    | GB/T7759.1            | 815-1   | D395  | 53517 |
| 8☆  | Transformer oil compression set<br>(compression 25%,125°C,168h),%                |                                                                                         | ≤40.0    |                       |         |       |       |
| 9   | Hot air aging<br>( 200°C,72h )                                                   | Hardness change,degree                                                                  | 0 ~ +10  | GB/T3512              | 188     | D573  | 53508 |
|     |                                                                                  | Change rate of tensile strength,%                                                       | ≥ -20    |                       |         |       |       |
|     |                                                                                  | Change rate of elongation at failure,%                                                  | ≥ -30    |                       |         |       |       |
| 10☆ | Transformer oil resistance<br>( 125°C,168h )                                     | Hardness change,degree                                                                  | -5 ~ +5  | GB/T1690              | 1817    | D471  | 53521 |
|     |                                                                                  | Change rate of volume,%                                                                 | -5 ~ +5  |                       |         |       |       |
| 11☆ | Compatibility with transformer oil<br>(800mL oil,surface area 65cm²,100°C, 164h) | Oil dielectric loss factor tanδ(90°C) increment(compared with pure oil)10 <sup>-2</sup> | ≤0.5     | JB/T8448.1 Appendix A | —       | D3455 | —     |
| 12  | Ozone resistance static stretching cracking                                      | Stretch 20%,16h,40°C, Ozone concentration 500×10 <sup>-8</sup>                          | No creak | GB/T7762              | 1431-1B | D1149 | 53509 |