



## Specification of one-component heat conducting silica gel DR-1069

### 1. Introduction

DR-1069 one-component heat conducting silica gel is a kind of viscous fluid or pasty sizing material packed with aluminum cover or plastic cask. At room temperature, it can combine with moisture in the air and vulcanize into high-performance elastomer, so it's excellent binder and sealant made with metal and non-metallic materials.

After solidification, it can fully develop superior electrical insulating property of organosilicon material. Within wide temperature scope, it possesses strong stretch resistance, vibration and shock resistance. Besides, it also owns excellent weather resistance, thermal conductivity, cold endurance, hydrophobicity, acid and alkali resistance.

### 2. Technical performance

Before vulcanization:

Serial No.	Item	Indicator	Remark
1	Appearance	Black, transparent, white	Visual inspection
2	Fluidity	Pasty fluid	Visual inspection
3	Surface drying time (minute)	15	Finger touch

After vulcanization:

Serial No.	Item	Indicator	Remark
1	Hardness (Shore A) $\geq$	35A	
2	Tensile strength (Mpa) $\geq$	1.25	
3	Elongation at break (%) $\geq$	220	
4	Volume resistivity ( $\Omega$ .cm) $\geq$	$1.0 \times 10^{15}$	
5	Surface resistivity ( $\Omega$ )	$1.0 \times 10^{14}$	
6	Shearing strength (Mpa)	1.0	
7	Peel strength (Kv/m)	0.85	
8	Dielectric constant (1MHz)	2.8	
9	Dielectric loss factor (1MHz)	$2.0 \times 10^{-3}$	
10	Breakdown voltage (KV/mm) $\geq$	17.5	
11	Temperature range	-60~200 $^{\circ}$ C	
12	Heat conductivity coefficient	0.5-1.0	



#### 4. Usage

- (1) The surface of articles to be adhered shall be clean, dry and reliable
- (2) Unscrew cover, coat sizing material on process surface for rapid assembly and fixation
- (3) Avoid coating sizing material outside of process surface, use cloth soaked with turpentine to wipe the non-vulcanized rubber, clear away vulcanized waste with sharp blade
- (4) Surface drying time of sizing material is 15 minutes and complete vulcanizing time is 10 hours.  
Assemble as per below steps after solidification for 4 hours. Conduct aging test at least after 10 hours so as to reduce harm to coating
- (5) Fasten down the cover after use

#### 5. Packing specification

2600 ml/piece

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