



Tech Data Sheet

SM7704

Dielectric Silicone Compound

Silchem SM7704 is a silicon dioxide thickened high molecular weight dimethylpolysiloxane based material. It is a stiff, tacky dielectric compound with excellent water repellency. It was designed for use as a water repellent, sealing grease-like compound. It is high tack and chemically inactive making it an excellent choice for vacuum and sealing interfaces, protecting electrical components, such as connectors, meters and ignition systems. Silchem SM7704 is also an excellent lubricant for rubber and plastics of all types. The compound meets the requirements of 21 CFR 178.3570 of the FDA, Lubricants for Incidental Food Contact.

Product Data	
Typical Properties	
TEMPERATURE RANGE	-100°F to 500° F
PENETRATION (Worked 60X)	230-270
UNWORKED PENETRATION	200-250
BLEED (After 1 Hour @ 200°C)	0.6%
EVAPORATION (1.0%Max after 1 Hour @ 200°C)	0.20%
APPEARANCE (WHITE)	TRANSLUCENT PASTE
SPECIFIC GRAVITY	1.00-1.03
THERMAL CONDUCTIVITY	0.11
DIELECTRIC STRENGTH (50 MIL)	500 V/MIL
DIELECTRIC CONSTANT (100Hz)	3.0
DISSIPATION FACTOR (100Hz/1 kHz)	0.0001
VOLUME RESISTIVITY (OHM-CM)	2.18 X10 ¹⁴

PACKAGING	CATALOG NUMBER
5 Gallon Plastic Pail (40 lbs., 18kg)	SM7704/5G
1 Gallon Plastic Pail (8 lbs., 3.6kg)	SM7704/1G
8oz Clear Tube w/Resealable Flip-top Cap (227 gm)	SM7704/8.0
5.3oz Clear Tube w/Resealable Flip-top Cap (150 gm)	SM7704/5.3
5gram Clear Mini-Tube	SM7704/5gm/mt
10oz Caulking Tube	SM7704/10oz/CT
14oz Cartridge	SM7704/14oz/C

APPLICATIONS

Dielectric Compound
Cable Accessories in Utility Underground Systems
Rubber Lubrication
Vacuum Sealing
Water Resistant

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It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application.

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