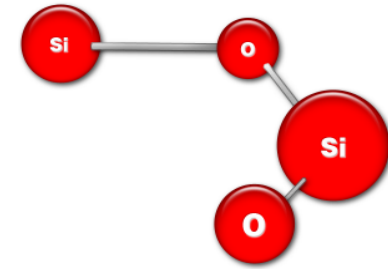


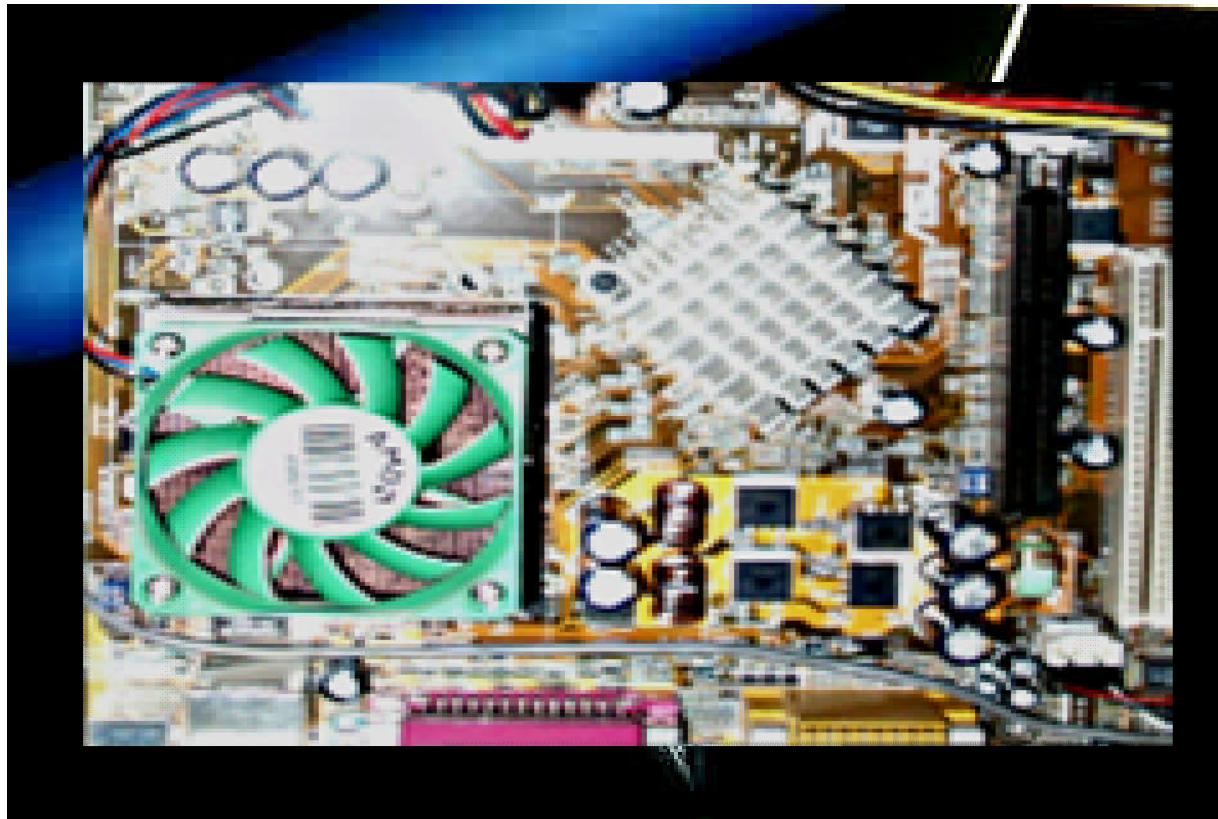
Flexichem Pty Limited

Specialising in Silicones

ABN 31 050 020 169



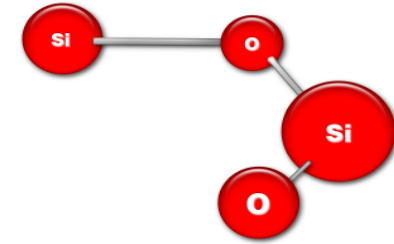
Silicone Compounds and Greases



Heat sink compound helps to cool electronic circuits

Flexichem Pty Limited

Silicone Compounds and Greases



INTRODUCTION

Silicone compounds are silicone fluids thickened with a variety of special fillers, while silicone greases are metallic soap thickened silicone fluids, used in metal to metal applications.

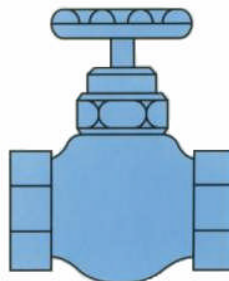
SILICONE COMPOUNDS

Silicone compounds are ideal for the lubrication of plastics and rubber, they provide an excellent moisture barrier or seal, and can be used as a mould release. They are used to protect parts from corrosion, to transfer heat, and as a long term lubricant. They are generally non corrosive, non-solidifying, and water resistant. They are not recommended for metal to metal load bearing lubrication.

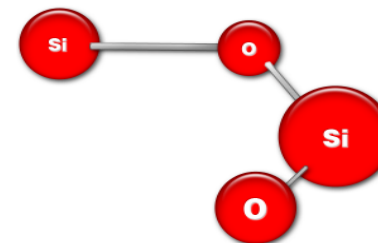
Silicone compounds find applications in electronics, automotive, marine, on high voltage insulators (live spray), in the lubrication of taps and valves, and as mould releases.

***Flexichem* PRODUCTS**

CC1001
CC1002
CC1004
CC1006T



Flexichem Pty Limited



Silicone Compounds and Greases

- **CC1001** is a zinc oxide filled compound, specially designed for heat transfer applications which has high thermal conductivity, high heat dissipation, and a high dielectric constant.
- **CC1002** is a silicone compound specifically designed for use on high voltage insulators. It reduces the arcing across the insulators caused by salt, pollution, dust, and moisture.
- **CC1004** is a general purpose silicone compound with a wide variety of applications, including lubrication of valves, spark plug boots, distributor caps, and as mould release.
- **CC1006T** is a sprayable version of CC1002 utilising a special silicone solvent which has a high flashpoint classification and is very safe to use in populated areas.

Product	Consistency Worked Penetration	Appearance	S.G	Temperature Range °C	Evaporation	Bleed	Water Washout %	Thermal Conductivity ²	Dielectric Constant	Dielectric strength volts/mm	Volume Resistivity (ohm-cm)
CC 1001	200-350	White opaque paste	2.60	-50 to 205	2% max	2% max	0.30	0.58	4.8	-	1 x 10 ¹⁴
CC1002	200-300	White semi translucent paste	1.03	-40 to 200	3% max	3% max	0.90	0.11	3.2	710	1 x 10 ¹²
CC1004	210 - 290	White semi translucent paste	1.02	-40 to 205	2% max	3% max	0.50	0.11	3.2	710	1 x 10 ¹²
CC1006T ¹	210-290	White semi translucent gel/liquid	0.90	-40 to 200	50%	-	-	0.11	3.2	710	1 x 10 ¹²

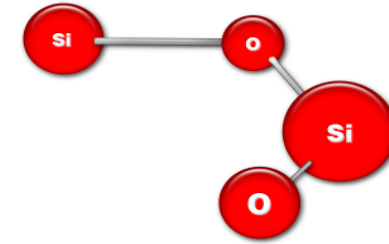
The above typical properties data should not be used as specifications, these are available by contacting Flexichem

1 Properties of compound once carrier has been evaporated.

2 Kilojoules/hour/cm²/K/ cm

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Silicone Compounds and Greases



Silicone Compound Terminology

Penetration – A measure of the thickness, or consistency of a grease or compound. This test measures the depth to 0.10mm that a standard cone penetrates the grease under standard weight time, and temperature. ASTM D-217
The higher the value the softer the grease.

Bleed – This test measures of the amount of oil loss when the grease or compound being subjected to high temperature. It is measured as a percent loss over 24 hours.

Water Washout – This test measures the amount of grease or compound washed from a ball bearing in 1 hour by a stream of water at 38°C.
ASTM D-1264

Evaporation – This test measures the evaporation loss due to the grease or compound being subject to high temperature for 24 hours.

Dielectric Strength – Is the voltage at which the electrical breakdown of the compound occurs. It is measured as volts/mm at a 50mm gap.
ASTM D-149

Dielectric Constant – Is the index value that measures the ability of a grease or compound to resist the transmission of an electrostatic force from one charged body to another. The lower the value the greater the resistance.

Volume Resistivity - Is the electrical resistance between opposite forces of a 1cm cube of grease or compound measured as ohm-centimeters.
ASTM D-257

Thermal Conductivity – Is the rate at which heat flows through the grease or compound. It is measured as Kilojoules per hour per sq cm per K per cm.
The higher the number the more heat is able to be dissipated.

All **Flexichem** greases and compounds are available in 4kg, 20kg pails, and 200kg packages. They can also be supplied in 300g cartridges, and smaller aluminium tubes upon request.

