

BOSS® 414 Silicone Thermally Conductive Compound

TYPICAL PROPERTIES

Appearance	White Paste
Penetration (worked 60X)	270
Bleed (200°C-24 Hrs)	0.2%
Evaporation (200°C-24 Hrs)	0.5%
Dielectric Strength (50 mil)	315 V/mil
Dielectric Constant (1 KHz)	4.2
Volume Resistivity (Ohm-cm)	7.0×10^{13}
Dissipation Factor (1 KHz)	0.005
Specific Gravity	2.59
Temperature Range	-57°C to 204°C (-70°F to 400°F)
Thermal Conductivity	0.56 BTU-FT/FT ² -°F-HR

*Information on this data sheet is subject to change without notice and should not be used for writing specifications. For additional information on specific applications, contact Accumetric, LLC



DESCRIPTION

BOSS® 414 is a thermally conductive compound based on a dimethyl polysiloxane which has been filled with metal oxides. It is easily spreadable and has low bleed.

SPECIFICATIONS

BOSS® 414 Silicone Thermally Conductive Compound meets the requirements of MIL-C-47113B. **BOSS® 414** Silicone Thermally Conductive Compound also complies with the requirements of the FDA, 21 CFR 178.3570 Lubricants for Incidental Food Contact. Compliance does not mean that the material is FDA approved. To be approved the user must also comply with all applicable FDA requirements.

USES

BOSS® 414 Silicone Thermally Conductive Compound is a stable, water repellent, dielectric, heat transfer medium that promotes heat dissipation by filling voids and gaps between mating surfaces. It's main use is in electronic components such as thermal wells, sensors, power diodes, transistors, ballasts, thermistors, and semi-conductors to dissipate heat away from the component.

PACKAGING

BOSS® 414 is available in 5.3 Fl. Oz. tubes, 1 gallon pails (15 lbs.), and 5 gallon pails (60 lbs.). Other sizes available upon request.

LIMITATIONS

Do not use with highly oxidative chemicals such as liquid oxygen, chlorine or peroxides, nor surfaces to be painted. Not for use as a lubricant for metal to metal surfaces.

CLEAN UP

Spilled silicone greases and compounds will cause slippery conditions. Wipe up and clean spills immediately to prevent possible injury.

Silicone greases and compounds may be cleaned with the use of hydrophobic solvents (non-polar) such as chlorinated ethanes, toluene, hexane, or mineral spirits. They are generally unaffected by hydrophilic solvents (polar) such as alcohols, ketones, ethers or water.

Whenever solvents are used, all proper safety precautions must be observed. It is advisable to consider all solvents as toxic and use them only in well ventilated areas with proper protective equipment such as goggles, gloves, clothing and respirators. Avoid prolonged exposure to solvents. Be aware of their flammability status.

Consult applicable OSHA, EPA and other federal, state and local regulations on the use of disposal of solvents.

Make sure that the choice of solvent does not affect the substrate that is being cleaned.

STORAGE AND SHELF LIFE

When stored in original unopened container at or below 100°F, **BOSS® 414** has a shelf life of 12 months from date of shipment. Extended storage life is probable, but the compound should be checked for consistency before use. Containers should always be kept sealed when not in use.

CAUTION

BOSS® 414 has not been known to produce any lasting harmful effects. Contact with the eyes may cause transitory irritation which usually disappears in a few hours. If contact with the eyes occurs, flushing them with water will relieve and reduce the discomfort.

USERS PLEASE READ

The information and data contained herein is believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since the supplier cannot know all the uses, or the conditions of use to which these products may be exposed, no warranties concerning the fitness or suitability for a particular use or purpose are made.

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

Likewise, if the application, product specifications or manner in which our products are used requires government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

The supplier warrants only that its products will meet its specifications. There is no warranty of merchantability or fitness for use, nor any other express or implied warranty. The users exclusive remedy and the suppliers sole liability is limited to refund of the purchase price or replacement of any product shown to be otherwise than as warranted. The supplier will not be liable for incidental or consequential damages of any kind.

Suggestions of uses should not be taken as inducements to infringe any patents.

MADE IN U.S.A.

BOSS® PRODUCTS

Accumetric, LLC
350 Ring Road
Elizabethtown,
Kentucky 42701 USA
800-928-BOSS(2677)
TEL (270)769-3385
FAX (270)765-2412
Outside U.S.
TEL +(270)769-3385
FAX +(270)765-2412

Accumetric Asia Pacific, LTD
18 Kitpanit Bldg. 5th Floor
#502 Patpong Road
Suriyawong, Bangrak
Bangkok, 10500 Thailand
TEL (662)634-3060
FAX (662)634-3066

www.bossproducts.com