

# **NM2010 - SILICON HEATSINK GREASE 10g**

# **NM2012 - SILICON HEATSINK GREASE 150g**



## **DESCRIPTION**

UNICK SILICONE HEAT TRANSFER COMPOUND IS A GREASE-LIKE SILICONE MATERIAL, HEAVILY FILLED WITH HEAT-CONDUCTIVE METAL OXIDES. THIS COMBINATION OF BASE AND FILLERS PRODUCTIVITY. THE LOW BLEED PROPERTIES OF THIS IMPROVED COMPOUND ASSURE LASTING PROTECTION FOR HEAT SINK COUPLING.

## **USES**

UNICK SILICONE HEAT TRANSFER COMPOUND IS APPLIED TO THE BASE AND MOUNTING STUDS OF TRANSISTORS AND DIODES. IT IS ALSO AN EFFECTIVE THERMAL COUPLER FOR ANY HEAT SINK DEVICE WHERE EFFICIENT COOLING IS REQUIRED. THIS SILICONE COMPOUND WILL NOT DRY OUT, HARDEN, OR MELT EVEN AFTER LONG TERM EXPOSURE TO TEMPERATURES UP TO 200 °C. IT MAINTAINS A POSITIVE HEAT SINK SEAL THAT IMPROVES HEAT TRANSFER FROM THE DEVICE TO THE HEAT SINK OR CHASSIS, THEREBY INCREASING OVERALL EFFICIENCY OF THE DEVICE.

## **PACKING**

7.5 GRAMS TUBE:           52mm x 60mm x 40mm  
150 GRAMS TUBE:       165mm x 185mm x 60mm

## **TYPICAL PROPERTIES**

COLOR.....	WHITE OPAQUE
CONSISTENCY	
PENETRATION, WORKED (60) AND MEASURED WITHIN ONE MINUTE	
AFTER WORKING (ASTM D 217).....	260
BLEED, PERCENT AFTER 24 HOURS AT 200 °C .....	1.0
EVAPORATION, PERCENT AFTER 24 HOURS AT 200 °C .....	1.0
SPECIFIC GRAVITY AT 25 °C .....	2.3
THERMAL CONDUCTIVITY, K FACTOR, CAL/CM <sup>2</sup> /°C/SEC/CM.....	0.0015
DIELECTRIC STRENGTH, KV AT 0.1mm, ASTM D-149.....	1.0
VOLUME RESISTIVITY	
OHM-CM ASTM D-257.....	1X10 <sup>14</sup>

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## **SAFETY DATA SHEET**

### **1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND**

#### **THE COMPANY / UNDERTAKING.**

Product Name: Unick Silicone Heat Transfer Compound  
Product Code: UH-103  
Supplier: Unick Chemical Corp.  
P.O. Box 53-251, Taipei, R.O.C.

### **2. COMPOSITION / INFORMATION ON INGREDIENTS**

(1) Dimethyl Polysiloxane	28%
(2) Zinc Oxide	65%
(3) Submicroscopic Pyrogenic Silica	4%
(4) Stabilizer	3%

The product does not contain "Solvent". There is no safety concern.

### **3. HAZARDS IDENTIFICATION**

Prolonged skin contact someone may cause skin irritation and / or dermatitis.

### **4. FIRST AID MEASURES**

General Advice: Show this safety data sheet to the doctor in attendance  
Inhalation: Move to fresh air in case of accidental inhalation of vapours.  
Skin Contact: Wash off with soap and plenty of water.  
Eye Contact: Flush eye(s) immediately with plenty of water if eye irritation persists, consult a specialist.  
Ingestion: Clean mouth with water and drink afterwards plenty of water.  
Consult a physician if necessary.

### **5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media: Extinguish with waterspray, dry chemical or alcohol foam

Extinguishing media which must not be used for safety reasons.

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## 6. ACCIDENTAL RELEASE MEASURES.

Personal precautions: Wear personal protective equipment  
 Environmental precautions: Do not flush into surface water  
 Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

Handling: When using, do not eat, drink, or smoke. Avoid contact with the skin and the eyes.

Storage: Keep containers tightly closed in a cool, well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment:

\*Respiratory protection: No personal respiratory protective equipment normally required.

\*Hand protection: not required under normal use

\*Eye protection: not required under normal use

\*Skin and body protection: not required under normal use

Hygiene measures: When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Paste	(*as base oil)
Color:	White	
Odour:	none	
Boiling point/range:	>250	° C
Melting point/range:	1870	° C
Flash point:	230	° C
Autoignition temperature:	425	° C
Vapour pressure:	>2	hPa
Relative density:	(20 ° C) >=2.1	
Solubility:		
Water solubility	insoluble	g/l

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## 10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to avoid:	None reasonably foreseeable
Materials to avoid:	Strong acids
Hazardous decomposition products:	No decomposition if stored and applied as directed

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity:	No hazards deemed to be of major importance
Local effects:	Prolonged skin contact may defat the skin and produce dermatitis
Sensitization:	No hazards deemed to be of major importance.
Long term toxicity:	Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments
Chronic toxicity:	Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

## 12. ECOLOGICAL INFORMATION

Mobility:	
Persistence and degradability:	Readily biodegradable, according to appropriate OECD test
Bioaccumulation:	Not applicable
Ecotoxicity effects:	Not applicable

## 13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Flush into sewer with plenty of water. Do not contaminate ponds, waterways or ditches with chemical or used container  
Contaminated packaging: Can be offered for recycling, re-conditioning or puncture

## 14. TRANSPORT INFORMATION

Proper shipping name	Not classified as dangerous in the meaning of transport regulations
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