SAFETY DATA SHEET

REVISION DATE: 12/01/2000

REF: HTS

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: **SILICONE HEAT TRANSFER COMPOUND**

Product code: HTS

Supplier:

ELECTROLUBE
H.K. Wentworth Ltd.,
Wentworth House, Blakes Road,
Wargrave, Berkshire, RG10 8AW, United Kingdom.

Telephone (UK): **+44 (0) 118 9404031** **Fax No: +44 (0) 118 9403084**
Telephone (FR): **+33 (0) 148 15 4363**
Telephone (DE): **+49 (0) 221 9355350**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation

Chemical Name	CAS-No	EC-No	Class	Weight %
NON HAZARDOUS CONSTITUENTS				100

3. HAZARDS IDENTIFICATION

Most important hazards: Non hazardous

Specific hazards Solvents may degrease the skin. Prolonged skin contact may cause skin irritation and/or dermatitis. Contact with eyes may cause irritation.

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: Not applicable

Specific hazards: Standard procedure for chemical fires

Special protective equipment for firefighters: Wear self contained breathing apparatus for fire fighting if necessary

Specific methods: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Not applicable

Environmental precautions: No special environmental precautions required

Methods for cleaning up: Dilute with water. Wipe up with absorbent material (e.g. cloth, fleece)

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

Chemical Name:	**National occupational exposure limits: HSC(EH40)**
NON HAZARDOUS CONSTITUENTS	

Engineering measures: Ensure adequate ventilation

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	* BASE OIL	
Colour:	white		
Odour:	none		
Boiling point/range:		> 100 *	**°C**
Melting point/range:		1970 (filler)	**°C**
Flash point:		>100 *	**°C**
Relative density:	**(** 20 **°C)**	**>=** 2.1	
Bulk density:		2100	**kg/m3**
Solubility:			
Water solubility		insoluble	**(g/l)**

10. STABILITY AND REACTIVITY

Stability: Stable.

Conditions to avoid: No conditions to be specially mentioned.

Materials to avoid: strong acids and oxidizing agents

Hazardous decomposition products: No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Not applicable

Local effects: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea

Sensitization: Not applicable

Long term toxicity: No persistent or cumulative effects were observed

Chronic toxicity: Not applicable

12. ECOLOGICAL INFORMATION

Mobility:

Persistence and degradability: Readily biodegradable, according to appropriate OECD test

Bioaccumulation: Not applicable

Ecotoxicity effects: Not applicable

Product name: **SILICONE HEAT TRANSFER COMPOUND**

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: No special precautions required. In accordance with local and national regulations.

Contaminated packaging: Offer rinsed packaging material to local recycling facilities

14. TRANSPORT INFORMATION

Proper shipping name not a dangerous substance as defined in the above regulations

15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations 90/492/EEC

- **Contains:**
- **Symbol(s):**

R-phrase(s):

S-phrase(s): S2 - Keep out of reach of children. S3 - Keep in a cool place.

16. OTHER INFORMATION

Revision number: 4

Further information: CN no. 34039990
Contact Name: Carolyn Booth
Department: Technical

Technical Data Sheet

PRODUCT DESCRIPTION:	**Silicone Heat Transfer Compound**	**DATE:**	**03/97**
PRODUCT CODE:	**HTS**	**PAGES:**	**1**

PRODUCT DESCRIPTION

Silicone Heat Transfer Compound is a metal oxide filled silicone oil providing an extremely efficient and exceptionally thermally conductive compound which will operate over a wide temperature range. Electrolube Heat Transfer Compound is recommended where the efficient and reliable thermal coupling of electrical and electronic components is required or between any surface where thermal conductivity of heat dissipation is important.

A full range of heat transfer products are available from Electrolube. This range includes non-silicone based pastes (HTC), a RTV rubber (TCR), an adhesive epoxy (TBS) and an epoxy based potting resin (ER2074). A even higher thermally conductive paste is also available, order code HTSP, for special applications where thermal management is critical.

FEATURES

* Excellent non-creep characteristics.
* Wide operating temperature range with low evaporation weight loss.
* Excellent thermal conductivity even at high temperatures.
* Easy to handle, economic in use and low in toxicity.

APPLICATION

Apply to the base and mounting studs of diodes, transistors, thyristors, heat sinks, silicone rectifiers and semi-conductors, thermostats, power resistors and radiators.

PROPERTIES

Colour:	White
Base:	Silicone Oil
Thermo-conductive Components:	Powdered Metal Oxides
Density @ 20°C:	2.10 g/cm^3
Temperature Range:	-100°C to +200°C
Thermal Conductivity:	0.9 W/mK
Weight Loss after 96 hours @ 100°C:	0.84%
Permitivity @ 10^6 Hz:	4.9
Specific Resistance:	1 x 10^{15} Ohms/cm
Dielectric Strength:	18 kV/mm
Penetration:	220-270

PACKAGING	ORDER CODE
20 ml Syringe	HTS20S
35 ml Luer Lock Syringe	HTS35SL
1 Kg Bulk	HTS01K

ELECTROLUBE Wentworth House, Blakes Road, Wargrave, Berkshire, RG10 8AW, UK
Telephone: +44(0) 118 940 4031/ 3014 Fax: +44(0) 118 940 3084
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