



Chemplex 1381, Pacific Oil
873X0114

Sikkerhedskort

Identifikation	Leverandør	Keensound Industries Ltd. Kowloon, Hong Kong tlf.nr. +852 2343 2617	PR-nr. - EF-nr. -
Mærkning	Risikoangivelser		Sikkerhedsforskrifter • Undgå kontakt med huden og øjnene.
	Indhold	Zinkoxid, silikonefedt	
Anvendelse		• Varmeledende pasta.	
Sundhedsfarlige egenskaber		• Langvarig og hyppig kontakt irriterer huden.	• Produktet irriterer øjnene.
Oplagring		• Ingen særlige krav.	
Sikkerhedsforskrifter ved brug		• Arbejdet skal tilrettelægges og udføres så hudkontakt undgås.	• Brug evt. beskyttelsehandsker af nitril-butadiengummi eller PVC. • Personligt beskyttelsesudstyr findes på varenr. i Dispomaten.
Førstehjælp	Indånding	• Bring den tilskadedkomne i frisk luft. Kontakt skadestue eller læge.	Huden • Vask grundigt med vand og sæbe.
	Øjnene	• Skyl straks grundigt med vand og kontakt skadestue eller læge. Fortsæt skylningen i mindst 15 minutter.	
Spild		• Spild opsamles eller fjernes med op-sugende materiale.	
Brand		• Brand slukkes med pulver, kulsyre eller ved kvælning.	• Brug ikke vandstråle.
Bortskaffelse		• Spild og kasserede restpartier skal bortskaffes som beskrevet i Koncern Standard 500B0683, "Instruktion for intern bortskaffelse af olie- og kemikalieaffald".	• Kemikalieaffaldskort: - • Kemikalieaffaldsgruppe: A
Miljøoplysninger		• Ingen oplysninger tilgængelige.	

Indholdsstoffer, Grænseværdier		ppm	mg/m ³	Anm.	År
	Zinkoxid	-	4	-	1996
	Silikonfedt	-	-	-	-

Fysiske/kemiske oplysninger	Leveringsform: Pasta	Ekspløsningsgrænse nedre/øvre:	0 / 0
	Farve: hvid	Damptryk:	kPa °C
	Lugt:	Massefylde: 2,5	kg/L
	pH-værdi:	Opløselighed i vand:	
	Kogepunkt min./max.: / °C	Opløselighed i olie:	
	Smeltepunkt min./max.: / °C	Fordelelingskoefficient: 0	
	Flammepunkt min./max.: / °C	Ledningsevne: 0	µS/cm
	Antændelighed:	Viskositet:	cSt °C
	Selvantændelsestemperatur: 0 °C		

Stabilitet/reaktivitet	• Ikke udfyldt.		
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Transport	UN-nr.: -	Transportklasse ADR: -
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Andre oplysninger	Advarselsetiket varenr.: 994B5041	MAL-kode: -
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HEAT CONDUCTION COMPOUND

Description

HEAT CONDUCTION COMPOUND is a silicone fluid based, grease-like material specially blended with thermally conductive fine metal oxide powders. This formulation results in very high thermal conductivity, low bleed and excellent high temperature stability. This highly viscous product will not harden, melt or dry out and will tenaciously adhere to metal surfaces even when exposed to high temperatures for extended periods of time.

Application

When energized, many electrical/electronic devices become warm, even hot to the touch. This heat can become detrimental to the performance and life of heat sensitive electrical parts. HEAT CONDUCTION COMPOUND is commonly used as an interface to facilitate the transfer of heat from the electrical device to the heat sink or chassis. This positive heat sink seal will increase the overall efficiency of the electrical device. HEAT CONDUCTION COMPOUND is used on transistors, diodes and rectifiers. It can also be used as a thermal compier where cooling is required and as a coating for transformers on appliances such as TV sets.

Typical Properties

Property	Test Method	Condition	Results
Appearance			White, opaque
Consistency	ASTM D-217	Worked 60 X	250-330
Specific Gravity		77° F/77° F (25° C/25° C)	2.5
Bleed, %	FTM-321 (Modified)	30 hrs @ 392° F (200° C)	< 0.5
Evaporation, %	FTM-321 (Modified)	30 hrs @ 392° F (200° C)	< 0.1
Temperature Range, ° F(° C)			-40 to 400 (-40 to 204)
Solidification Point	ASTM D-1478	-65 (-54)	7000 gm-cm
Dropping Point, ° C	ASTM D-2265		> 260
Water Washout, %	ASTM D-1264	1 hr @ 100° F (38° C)	0.4 wt
Thermal Conductivity	ASTM D-177	36° C @ 1 sec	1.7 x 10 ⁻³ cal/sec/cm ² C
Dielectric Strength	ASTM D-149	0.050" Gap	400 volts/ml
Dielectric Constant	ASTM D-150	50 Hz 1000 Hz	4.93 4.90
Dissipation Factor	ASTM D-150	50 Hz 1000 Hz	0.0050 0.0011
Arc Resistance	ASTM D-495		77 sec
Volume Resistivity	ASTM D-257	Ambient	3.1 x 10 ¹³ ohm-cm

The composition for HEAT CONDUCTION COMPOUND is as follows:

Zinc compound: CAS 1314-13-2.
 Dimethyl Polysiloxane: CAS 63148-62-9.
 Fumed Silica: CAS 67762-90-7.

Way of delivery:

Sales and order no. 041E0110 - HEAT CONDUCTION COMPOUND , 5 gram.

Sales and order no. 041E0111 - HEAT CONDUCTION COMPOUND , 0,9 kg.

Analysis of content of 97-01-17:

SEM-element analysis shows content of zinc, silicon, oxygen and carbon.

X-ray analysis to see the proportion between zinc oxide and silicone but the silicone is amorphous so only the zinc oxide (ZnO) can be seen.

TG analysis to determine the loss of weight by burning of the silicone, about 30% silicone and about 70% zinc oxide.

Viscosity at 21.1° C = 24.77 PA*s and at 24.9° C = 28.2 Pa*s.

041E0110 material safety data sheet of 97-02-10, 873X0114. Warning label 994B5041.

041E0111 material safety data sheet of 97-02-10, 873X0115. Warning label 994B4310.



WARNING: Blending!

Consisting heat conduction paste, material safety data sheet 873X0028 is based on mineral oil with lithium soap as thickening agent and aluminium powder as heat-conducting agent.

New heat conduction paste is based on silicone oil with silica as thickening agent and zinc oxide as heat-conducting agent.

If the two products get into contact or are mixed they will blend but the possibility that they will separate a little on a longer term cannot be excluded. It can be difficult to mix silicone oil and mineral oil. A chemical reaction will not take place. Zinc oxide and the aluminium powder will continue to transfer heat.

Of course the thermal conductivity will change if a product is mixed with another product with a different thermal conductivity.

It is not advisable to mix the two products but it is possible to refill with HEAT CONDUCTION COMPOUND without having to remove the existing heat conduction paste first.