DOW CORNING

道康宁（中国）投资有限公司
物质安全资料表

最新修改日期: 2011/05/05
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DOW CORNING(R) TC－5625导热硅酯

一、化学品及企业识别

1.1 产品名称: DOW CORNING(R) TC－5625导热硅酯

1.2 产品编码: 04079661

1.3 化学品分类: 硅酮化合物

1.4 产品使用建议和使用限制: 电子学/微电子学应用

1.5 公司介绍

制造商/供应商名称: 道康宁（中国）投资有限公司
地址: 中国上海市张江高科技园区张衡路1077号 邮编: 201203
电话: 400 880 7110 **传真电话:** (86 21) 50796552
电邮地址: China.info@dowcorning.com
应急电话: (86 512) 56732049

1.6 首次制作日期: 2010/02/11

1.7 在运输中发生紧急事件，溢出，泄漏和火灾时: 请拨打CHEMTREC 国际电话 1（703）527-3887 ; 北美洲: 800-424-9300（接受受话者付款）

二、危险性鉴别

2.1 危险性分类:
对水环境的急性危害类别3
对水环境的慢性危害类别3

2.2 标签包括防范说明

图形符号: 无。

信号词: 无。

危险风险声明:
对水生生物有害。
对水生生物有害具有长期持续影响。

防范说明:
避免接触皮肤及眼睛。
防止释放在周围环境中。
发生火灾和/或爆炸时，不得吸入烟雾。
如果接触眼睛：用水小心地反复冲洗。戴隐形眼镜者如方便，先取下隐形眼镜，然后继续冲洗眼睛。
如果接触皮肤：用大量肥皂和水温和冲洗。
按照当地法规进行废弃处理。

2.3 其他危险: 未知。

DOW CORNING(R) TC－5625导热硅酯

三、 成分 / 组成信息

3.1 化学类别: 混合物

3.2 危险组分

化学品名称	CAS 编号	% (w/w)
氧化镉	1306-19-0	<1

四、急救措施

4.1 急救措施

眼睛: 立即用水冲洗。
皮肤: 毋需急救。
吸入: 毋需急救。
经口: 就医处理。
注释: 对症医治。

4.2 重要症状及危害效应: 正常使用下，无显著不良影响。

4.3 急救或救援人员人身保护

呼吸系统防护: 不需要使用呼吸防护设备。
眼睛防护: 使用适当的防护－安全眼镜是最起码要求。
皮肤防护: 进餐前和下班时进行适当清洗。

4.4 对医生的提示: 对症医治。如果您想了解更多的信息，请与道康宁（中国）投资有限公司联络。

五、消防措施

5.1 适当的灭火介质: 大火时使用干化学物品、泡沫或水雾。 小火时使用二氧化碳、干化学物品或水雾。可以水冷却暴露于火灾中的容器。

5.2 禁止使用的灭火剂: 未确定。

5.3 特殊危害: 无。

5.4 特殊灭火程序: 根据当地紧急计划，决定是否需要撤离或隔离该区域。 用水冷却受火灾影响的容器。

5.5 消防人员的特殊保护设备: 扑灭涉及化学物品的大火时，应佩戴自给式呼吸器及防护衣物。

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六、泄漏应急处理

6.1 个人防护注意事项: 避免眼睛接触。 不可内服。

6.2 环境保护注意事项: 不允许大量地进入排水系统或水面。

6.3 消除方法: 遵守在本物质安全资料表中所列的所有的个人防护设备使用建议。假如围堵的物品可以被吸起，应将其装入合适的容器内。 抹去或铲起并装入容器内，以使回收利用或废弃。 适当清理泄漏区域，因为即使少量泄露物也会产生滑腻危害。要求使用蒸汽、溶剂或清洁剂作最终清理。 适当处理浸透饱和的吸收剂或清洁物品，因为其可能产生自热。 有关法律规定可能适用于本物品的泄漏与释放，同样也适用于用来清理泄漏的材料物品。您需要确定较合适的法律法规。

七、操作处置与储存

7.1 操作注意事项: 使用充分的通风排气设备。 避免眼睛接触。 不可内服。 施行良好工业卫生措施，请于操作后进行清洗，尤其是在饮食或抽烟之前。

7.2 储存提示: 需谨慎小心，远离氧化性物料储存。

7.3 不适合的包装材料: 未确定。

八、接触控制/个体防护

8.1 工业卫生标准:

组分	CAS 编号	接触极限
氧化镉	1306-19-0	中国: TWA 0.01 mg/m3 as Cd. STEL 0.02 mg/m3 as Cd. 人类致癌物. 遵守镉的暴露极限。OSHA PEL (final rule): TWA 0.005 mg/m3. ACGIH TLV: TWA 0.01 mg/m3 total dust, 0.002 mg/m3 respirable fraction.

8.2 工程控制

局部通风设备: 毋需使用。
普通通风设备: 建议使用。

8.3 常规操作的个人防护设备

呼吸系统防护: 不需要使用呼吸防护设备。
使用适当的呼吸器: 毋需使用。
眼睛防护: 使用适当的防护－安全眼镜是最起码要求。
手防护: 毋需特别防护。
皮肤防护: 进餐前和下班时进行适当清洗。
个人卫生措施: 施行良好工业卫生措施，请于操作后进行清洗，尤其是在饮食或抽烟之前。

8.4 泄漏的个人防护设备

呼吸系统防护:	不需要使用呼吸防护设备。
眼睛防护:	使用适当的防护－安全眼镜是最起码要求。
皮肤防护:	进餐前和下班时进行适当清洗。
预防措施:	避免眼睛接触。 不可内服。 采取适度的防护。

备注: 这些操作注意事项都是基于常温常规操作。如果在高温使用或以气溶胶状态被使用时，需遵守其他的注意事项。

九、理化性质

9.1	**物理形态:**	脂膏。
9.2	**颜色:**	灰色
9.3	**气味:**	无气味
9.4	**pH 值:**	无数据。
9.5	**熔点:**	无数据。
9.6	**沸点/范围:**	无数据。
9.7	**闪点:**	> 100 °CSETAFLASH 闭杯测试法
9.8	**爆炸极限:**	无数据。
9.9	**蒸气压(25℃):**	无数据。
9.10	**相对蒸气压（空气=1):**	无数据。
9.11	**比重:**	4.20 g/cm3
9.12	**水溶性:**	无数据。
9.13	**分配系数（正辛醇/水）:**	无数据。
9.14	**引燃温度:**	无数据。
9.15	**分解温度 :**	无数据。
9.16	**气味阈值:**	无数据。
9.17	**蒸发率:**	无数据。
9.18	**燃烧性（固体，气体）:**	不适用。

以上资料仅供参考，如果要准备产品资料，请与道康宁公司联络。

十、稳定性和反应性

10.1 稳定性: 稳定的。

10.2 危险反应的可能性: 不会产生危害的聚合反应。

10.3 避免接触的条件: 无。

10.4 禁配物: 可与强氧化剂发生反应。

10.5 分解产物: 二氧化碳及微量的未完全燃烧的碳化物。 二氧化硅。 甲醛。 金属氧化物。

十一、毒理学资料

11.1 暴露途径: 皮肤接触和意外吞食。

11.2 过分接触的影响和症状: 正常使用下，无显著不良影响。

11.3 急性毒性:

化学品名称	CAS 编号	LD50 (经口)	LD50 (经皮肤)	LC50 (吸入)
氧化镉	1306-19-0	72 mg/kg (耗子)	-	1962 MG/M3/MIN (耗子; 1 分钟 粉尘/烟雾)

眼睛: 直接接触可能引起短暂的发红及不舒服感。
皮肤: 单一短时间暴露不会有重大影响。
食入: 正常使用时只具很低的摄入危害。
吸入: 单一短时间暴露不会有重大影响。

11.4 慢性毒性

皮肤: 无适合的资料。
食入: 反复或大量摄入可能造成身体内部伤害。
吸入: 无适合的资料。

11.5 其它健康危害信息: 吸入烟雾可能导致金属烟雾热，伴有发热、畏寒、疼痛、胸腔发闷及咳嗽的流感症状。

以上所列举的潜在的危害是建立对产品或类似产品的组分研究所得数据或专家对产品的评审的基础上。

十二、生态学资料

12.1 水生和陆生生态毒性

生态毒性效应:

急性影响: 对水生生物有害。 然而，由于本产品的物理形态与非水溶性性质，所以对生物体可用率是很小的 。

	慢性影响:	对水生生物有害具有长期持续影响。 然而，由于本产品的物理形态与非水溶性性质，所以对生物体可用率是很小的 。
	无脊椎动物:	*水蚤(Daphnia magna)* 48 小时 EC50 > 300 mg/l
	对废水处理厂的影响:	不能预示对细菌的有害影响。
12.2	**持久性和降解性**	
	水:	固体物品，不能溶解于水中。
12.3	**生物蓄积性潜力**	
	生物积累性:	无生物累积能力。 本产品为不溶于水的固体物质，如被摄入不能被人体吸收。
12.4	**在土壤中流动性:**	本产品为固体物，不含相当浓度的水溶性的可能从本产品中滤出的组分，因此对陆上生物体无危害性。
12.5	**进一步的环境补充资料:**	无特定的信息。

十三、废弃处置

13.1	**产品废弃物处置方法:**	按照当地法规进行废弃处理。
13.2	**包装废弃物处置方法:**	按照当地法规进行废弃处理。

十四、运输信息

14.1 **公路和铁路运输**

不适用。

14.2 **海运 (IMDG)**

不属 IMDG 编码。

14.3 **空运 (IATA)**

不属 IATA 规定。

14.4 **特殊要求和其他资料 :** 无。

十五、法规信息

15.1	**适用法规:**	工作场所安全使用化学品规定[(1996)劳部发423号] 化学品分类和危险性公示通则[GB 13690-2009]
15.2	**化学品库存**	

EINECS:	所有组份均列入或予以豁免。
IECSC:	所有组份均列入或予以豁免。
ENCS/ISHL:	请洽商当地道康宁公司。
DSL:	本物品中的化学成分并不被列入DSL化学物质目录；但是1)符合低容量化学物质免除规定或2)一新化学物质已通告加拿大环境保护单位；请洽商当地道康宁公司。
TSCA:	本物品中的所有化学成分都被列入TSCA 8(b)化学物质目录或获得TSCA 8(b)化学物质目录的豁免。本产品中一个或多个化学成分符合40 CFR 723.250聚合物豁免的标准。
KECL:	所有成份均被列出、予以免除或公告。
PICCS:	一个或数个以上成份均不被列出或予以免除。
AICS:	未评估。
HSNO:	未评估。

十六、其他信息

16.1 联络处: 技术信息中心 400 880 7110

16.2 制作者: 道康宁（中国）投资有限公司

图例:

- 没有具体的资料

这个资料不是产品说明书，而是为了提供有代表性价值的概念。这里没有担保、表白或暗示。推荐的工业卫生和安全处理程序相信已基本适用。然而，每位用户应于使用前审阅此产品预定使用方式的建议并决定是否适用。

Product Information

DOW CORNING

Dow Corning® TC-5625 C Thermally Conductive Compound – Preliminary Data Sheet

Grey, flowable, non-curing thermally conductive compound

FEATURES & BENEFITS

- Optimized polymer matrix to help reduce pump out
- Flowable
- Good thermal conductivity
- Low thermal resistance
- Non-curing, no need for curing ovens
- Thermal management for LED lamp and luminaire

COMPOSITION

- Filled polydimethysiloxane

APPLICATIONS

- *Dow Corning*® TC-5625 C Thermally Conductive Compound is suitable for use as an interface material in lighting application.

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
One part or Two part	-	One
Color	-	Green grey
Viscosity	Pa-sec	81.757
	cP	81757
Thixotropy	-	1.48
Specific Gravity (Uncured)	-	4.2
NVC (Non Volatile Content)	%	99.5
Thermal Conductivity	W/m-K	2.6
Thermal Resistance at 20 psi	$^oC\text{-}cm^2/W$	0.1
Dielectric Strength	kV/mm	6.9
	Volts/mil	172

DESCRIPTION:

Dow Corning® brand thermally conductive compounds are grease like silicone materials, heavily filled with heat-conductive metal oxides. This combination promotes high thermal conductivity, low bleed and high-temperature stability. The compounds are designed to maintain a positive heat sink seal to improve heat transfer from the electrical/electronic device to the heat sink or chassis, thereby increasing the overall efficiency of the device. Electronic devices are continually designed to deliver higher performance. Especially in the area of consumer electronics, there is also a continual trend towards smaller, more compact designs. In combination these factors typically mean that more heat is generated in the device. Thermal management of electronic devices is a primary concern of design engineers. A cooler device allows for more efficient operation and better reliability over the life of the device. As such, thermally conductive compounds play an integral role here. Thermally conductive materials act as a thermal "bridge" to remove heat from a heat source (device) to the ambient via a heat transfer media (i.e. heat sink). These materials have properties such as low thermal resistance, high thermal conductivity, and can achieve thin Bond Line Thicknesses (BLTs) which can help to improve the transfer of heat away from the device.

APPLICATION METHODS

- Screen print
- Stencil print
- Dispense

HOW TO USE

Allow printed grease pad to dry open for 24 hours before assembly. Dry time allows the small amount of carrier fluid to evaporate.

SOLVENT EXPOSURE

In general, the product is resistance to minimal or intermittent solvent exposure, however best practice is to avoid solvent exposure altogether.

USABLE LIFE AND STORAGE

The product should be stored in its original packaging with the cover tightly attached to avoid any contamination. Store in accordance with any special instructions listed on the product label. The product should be used by the indicated Exp. Date found on the label.

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEB SITE AT DOW CORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.
For further information, please see our Web site, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent. Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

Developmental Product Disclaimer

Dow Corning® TC-5625 C Thermally Conductive Compound is a Dow Corning developmental material. The composition, features, benefits and other properties are subject to change. The future availability of this material is not guaranteed. You are responsible to determine the suitability of the Product for your contemplated use. The Product is provided "AS IS" WITH ALL FAULTS, AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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