


道康宁（中国）投资有限公司
物质安全资料表页码: 1/8
最新修改日期: 2011/08/08
版本号: GHS 1.2

DOW CORNING(R) 3140 RTV COATING

一、化学品及企业识别

- 1.1 产品名称:** DOW CORNING(R) 3140 RTV COATING
- 1.2 产品编码:** 01015788
- 1.3 化学品分类:** 硅酮弹性体
- 1.4 产品使用建议和使用限制:** 密封剂和胶粘剂
电子方面的应用
- 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:** 2010/01/29
- 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:** 皮肤致敏物类别1
- 2.2 标签包括防范说明**
图形符号: 
- 信号词:** 警告
- 危险风险声明:** 可能引起皮肤过敏反应。
- 防范说明:** 不要吸入喷雾或雾。
佩戴合适的防护衣物及手套。
受污染的衣服不得带出工作场所。
仅在室外或通风良好的区域使用。
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。
如果发生皮肤刺激或皮疹, 应及时就诊。
被污染的衣服重新洗涤后才可使用。

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按照当地法规进行废弃处理。

2.3 其他危险: 未知。

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)
三甲基化的二氧化硅	68909-20-6	10 - <30
甲基三甲氧基硅烷	1185-55-3	<10
八甲基环四硅氧烷	556-67-2	<1

四、急救措施

4.1 急救措施

眼睛: 立即用水冲洗。
皮肤: 抹去并立即用水冲洗15分钟。假如刺激、症状加重或持续应就医处理。
吸入: 移至新鲜空气处, 假如症状持续应就医处理。
经口: 就医处理。
注释: 根据患者的状况及具体的暴露处理。

4.2 重要症状及危害效应: 可能引起皮肤过敏反应。

4.3 急救或救援人员人身保护

呼吸系统防护: 使用自给式呼吸器(SCBA)或其它供气式呼吸器。
眼睛防护: 使用全面罩型呼吸器。
皮肤防护: 进餐及下班时清洗。一旦接触到皮肤, 应尽快除去受到沾染的衣物, 并用水冲洗受到影响的皮肤部位。建议佩戴化学防护手套。

4.4 对医生的提示: 对症下药。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: 大火时使用干粉或泡沫。 小火时使用二氧化碳或干粉。 可以水冷却暴露于火灾中的容器。

5.2 禁止使用的灭火剂: 水。 避免灭火剂与容器内物质接触。

5.3 特殊危害: 无。

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- 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。

六、泄漏应急处理

- 6.1 个人防护注意事项:** 避免接触皮肤及眼睛。 避免吸入气雾、湿气、粉尘或烟雾, 保持容器密封。 不可内服。
- 6.2 环境保护注意事项:** 用沙、土或其它合适的抑制物来防止扩散或进入下水道、排水沟或河流。
- 6.3 消除方法:** 根据当地紧急计划, 决定是否需要撤离或隔离该区域。 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。 用适当的吸收剂清理泄漏残余物。 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。 产品暴露于水或湿空气时, 会释放出易燃性甲醇。使用时应提供通风排气设备, 将甲醇控制在标准范围内, 或使用供气式或自给式呼吸器。 避免接触皮肤及眼睛。 避免吸入气雾、湿气、粉尘或烟雾, 保持容器密封。 不可内服。 尽速脱掉污染之衣物。 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:** 保持容器密封, 储存时避免水或湿气。
- 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
三甲基化的二氧化硅	68909-20-6	道康宁管理标准: 5 mg/m3 Ceiling (as dust).
甲基三甲氧基硅烷	1185-55-3	道康宁管理标准: TWA 50 ppm; 并且见甲醇注释。
八甲基环四硅氧烷	556-67-2	道康宁管理标准: TWA 10 ppm.

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当接触到水或湿空气时将形成甲醇。应提供充分的通风排气设备，将暴露控制在OSHA PEL: TWA 200 ppm 及 ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm。

8.2 工程控制

局部通风设备: 建议使用。
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: 使用呼吸防护设备，除非有充分的局部通风排气设备或暴露评估证明暴露程度在其建议的标准范围内。“工业卫生部门”可协助判断现有的机械控制设备是否适当。
使用适当的呼吸器: 有机气雾/粉尘/湿气型。
眼睛防护: 使用适当的防护—安全眼镜是最起码要求。
手防护: 应佩戴化学防护手套。
皮肤防护: 进餐及下班时清洗。一旦接触到皮肤，应尽快除去受到沾染的衣物，并用水冲洗受到影响的皮肤部位。建议佩戴化学防护手套。
个人卫生措施: 尽速脱掉污染之衣物。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: 使用自给式呼吸器(SCBA)或其它供气式呼吸器。
眼睛防护: 使用全面罩型呼吸器。
皮肤防护: 进餐及下班时清洗。一旦接触到皮肤，应尽快除去受到沾染的衣物，并用水冲洗受到影响的皮肤部位。建议佩戴化学防护手套。
预防措施: 避免接触皮肤及眼睛。避免吸入气雾、湿气、粉尘或烟雾，保持容器密封。不可内服。采取适度的防护。
注释: 产品暴露于水或湿空气时，会释放出易燃性甲醇。使用时应提供通风排气设备，将甲醇控制在标准范围内，或使用供气式或自给式呼吸器。
当物品被加热到180度C以上时，可能会释放微量的甲醛，要求有充分的通风排气设备。

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。关于气溶胶吸入性毒性的进一步相关信息，请参阅美国硅酮工业协会(www.SEHSC.com)所制定关于硅酮制品于气溶胶用途的使用指导方针，或请和道康宁客户服务部门联络。

九、理化性质

- 9.1 物理形态:** 液体
9.2 颜色: 半透明白色
9.3 气味: 轻微的气味
9.4 pH 值: 无数据。
9.5 熔点: 无数据。

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9.6	沸点/范围:	> 65 °C
9.7	闪点:	> 101.1 °C闭杯测试法
9.8	爆炸极限:	无数据。
9.9	蒸气压(25°C):	无数据。
9.10	相对蒸气压 (空气=1):	无数据。
9.11	比重:	1.05 g/cm ³
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。 水、湿气或湿空气可引起危害性气雾的形成。
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。 氧化氮。 金属氧化物。

十一、毒理学资料

11.1	暴露途径:	吸入，皮肤接触和意外吞食。			
11.2	过分接触的影响和症状:	可能引起皮肤过敏反应。			
11.3	急性毒性:				
	化学品名称	CAS 编号	LD50 (经口)	LD50 (经皮肤)	LC50 (吸入)

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三甲基化的二氧化硅	68909-20-6	> 5,000 mg/kg (耗子)	-	-
甲基三甲氧基硅烷	1185-55-3	12.3 ML/KG (耗子)	> 9,500 mg/kg (兔子)	> 42.1 MG/L (耗子; 6 小时 蒸气)
八甲基环四硅氧烷	556-67-2	> 4,800 mg/kg (耗子)	> 2.5 ML/KG (兔子)	2975 PPM (耗子; 4小时 蒸气)

眼睛: 直接接触可能引起短暂的发红及不舒服感。
皮肤: 反复接触皮肤可能引起过敏性皮肤反应。
食入: 正常使用时只具很低的摄入危害。
吸入: 气雾和/或湿气可能刺激鼻子及咽喉。 过分暴露气雾可能引起瞌睡感。

11.4 慢性毒性

皮肤: 反复或长时间接触可能引起皮肤脱脂和干燥, 并有可能导致皮肤刺激和皮炎。
食入: 反复或大量摄入可能造成身体内部伤害。
吸入: 反复或长时间暴露吸入可能造成内部伤害。

11.5 其它健康危害信息:

本产品暴露在潮湿的环境中可能释放甲醇。过度吸入甲醇会致盲和造成神经系统损伤。

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: 对水生有机体无有害影响。

慢性影响: 对水生有机体无有害影响。

对废水处理厂的影响: 对细菌无有害影响。 通过与污水淤泥粘合, 可被去除 90% 以上。 本产品中的硅氧烷不是BOD的一部分。

12.2 持久性和降解性

降解性: 硅氧烷在土壤中退化降解。

12.3 生物蓄积性潜力

生物积累性: 无生物累积能力。

12.4 在土壤中流动性: 通过沉积或粘合至污水淤泥, 将硅氧烷从水中分离出来。

12.5 进一步的环境补充资料: 可根据要求提供额外的有关硅氧烷化合物的环境资料。

十三、废弃处置

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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。

TSCA:

本物品中的所有化学成分都被列入TSCA化学物质目录或获得TSCA化学物质目录的豁免。

AICS:

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:

所有组成份均列入 ENCS 或它的免除规定中。

KECL:

所有成份均被列入、予以免除或公告。

PICCS:

所有组份均列入或予以豁免。

DSL:

本物品中的所有化学成分都被列入DSL化学物质目录或获得DSL化学物质目录的豁免。

HSNO:

所有组份均列入或予以豁免。

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:

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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。


(R) 意指注册商标

DOW CORNING(R) 3140 RTV COATING

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

- 1.1 Product Name:** DOW CORNING(R) 3140 RTV COATING
- 1.2 Product Code:** 01015788
- 1.3 Chemical Classification:** Silicone elastomer
- 1.4 Recommended Product Usage and Limited Use:** Sealant and adhesive
Electrical applications
- 1.5 Company Details**
- Manufacturer/Supplier:** Dow Corning (China) Holding Company Limited
Address: 1077 Zhangheng Road, Zhangjiang Hi-Tech Park, Shanghai, P.R.C, Postal Code: 201203
- Telephone Number:** 400 880 7110 **Fax Number:** (86 21) 50796552
Email Address: China.info@dowcorning.com
Emergency Telephone Number: (86 512) 56732049
- 1.6 First Issuing Date:** 2010/01/29
- 1.7 Chemical Emergency, Spill, Leak & Fire Exposure during Transport:** CHEMTREC International call: 1 (703) 527-3887; North America: 800-424-9300 (collect calls accepted)

2. HAZARD IDENTIFICATION

- 2.1 Hazard Classification:** Skin sensitization: Category 1
- 2.2 Label Elements Including Precautionary Statements**
- Symbol:** 
- Signal Word:** Warning
- Hazard Risk Statement:** May cause an allergic skin reaction.
- Precautionary Statement:** Do not breathe spray or mist.
Wear suitable protective clothing and gloves.
Contaminated work clothing should not be allowed out of the workplace.
Use only outdoors or in a well-ventilated area.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
Dispose of in accordance with local regulations.

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2.3 Other Hazard: None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical characterization: Mixture

3.2 Hazardous Ingredients

<u>Chemical Name</u>	<u>CAS No.</u>	<u>% (w/w)</u>
Trimethylated silica	68909-20-6	10 - <30
Methyltrimethoxysilane	1185-55-3	<10
Octamethylcyclotetrasiloxane	556-67-2	<1

4. FIRST AID MEASURES

4.1 First Aid Measures

Eyes: Immediately flush with water.
Skin: Remove from skin and immediately flush with water for 15 minutes. Get medical attention if irritation or ill effects develop or persist.
Inhalation: Remove to fresh air. Get medical attention if ill effects persist.
Oral: Get medical attention.
Comments: Treat according to person's condition and specifics of exposure.

4.2 Important Symptoms and Hazard Effects: May cause an allergic skin reaction.

4.3 Personal Protection for First Aid or Rescue Personnel

Respiratory Protection: Use self-contained breathing apparatus (SCBA) or other supplied-air respirator.
Eye Protection: Use full face respirator.
Skin Protection: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.

4.4 Note to physicians: Treat symptomatically. For further information, the medical practitioner should contact Dowcorning (China) Holding Company Limited.

5. FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media: On large fires use dry chemical or foam. On small fires use CO2 or dry chemical. Water can be used to cool fire exposed containers.

5.2 Unsuitable Extinguishing Media: Water. Do not allow extinguishing medium to contact container contents.

5.3 Specific Hazards: None.

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|--|--|
| 5.4 Special Fire Fighting Procedures: | Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool. |
| 5.5 Special protective equipment for the Fire Fighters: | Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. |

6. ACCIDENTAL RELEASE MEASURES

- | | |
|---------------------------------------|--|
| 6.1 Personal Precautions: | Avoid skin and eye contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally. |
| 6.2 Environmental Precautions: | Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers. |
| 6.3 Methods for Cleaning up: | Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbant. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which laws and regulations are applicable. |

7. HANDLING AND STORAGE

- | | |
|--|---|
| 7.1 Handling Precautions: | Use with adequate ventilation. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control methyl alcohol exposures within exposure guidelines or use air-supplied or self-contained breathing apparatus. Avoid skin and eye contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally. Remove contaminated clothing immediately. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking. |
| 7.2 Storage Conditions: | Keep container closed and store away from water or moisture. |
| 7.3 Unsuitable Packaging Materials: | None established. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- | |
|--|
| 8.1 Industrial Hygiene Standards: |
|--|

IngredientsCAS No.Exposure Limits

DOW CORNING(R) 3140 RTV COATING

Trimethylated silica 68909-20-6 Dow Corning guide: 5 mg/m³ Ceiling (as dust).
 Methyltrimethoxysilane 1185-55-3 Dow Corning guide: TWA 50 ppm. Also see methyl alcohol comments.
 Octamethylcyclotetrasiloxane 556-67-2 Dow Corning guide: TWA 10 ppm.
 Methyl alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

8.2 Engineering Controls

Local Ventilation: Recommended.
General Ventilation: Recommended.

8.3 Personal Protective Equipment for Routine Handling

Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.
Suitable Respirator: Organic Vapor/Dust/Mist Type.
Eye protection: Use proper protection - safety glasses as a minimum.
Hand protection: Chemical protective gloves should be worn.
Skin protection: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.
Hygiene Measures: Remove contaminated clothing immediately. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

8.4 Personal Protective Equipment for Spills

Respiratory protection: Use self-contained breathing apparatus (SCBA) or other supplied-air respirator.
Eye protection: Use full face respirator.
Skin protection: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.
Precautionary Measures: Avoid skin and eye contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally. Use reasonable care.
Comments: Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control methyl alcohol exposures within exposure guidelines or use air-supplied or self-contained breathing apparatus. If this product is heated to > 180 degrees C, trace quantities of formaldehyde may be released, and adequate ventilation is required.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document regarding the use of silicone-based materials in aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Corning customer service group.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical Form: Liquid
9.2 Color: Translucent white
9.3 Odor: Slight odor

DOW CORNING(R) 3140 RTV COATING

9.4	pH:	Not determined.
9.5	Melting Point:	Not determined.
9.6	Boiling point/range:	> 65 °C
9.7	Flash Point:	> 101.1 °C(Closed Cup)
9.8	Explosive Limit:	Not determined.
9.9	Vapor Pressure @ 25°C:	Not determined.
9.10	Vapour Density (air=1):	Not determined.
9.11	Specific Gravity:	1.05 g/cm ³
9.12	Water Solubility:	Not determined.
9.13	Partition Coefficient (n-Octanol/Water):	Not determined.
9.14	Autoignition temperature:	Not determined.
9.15	Decomposition Temperature :	Not determined.
9.16	Odor Threshold:	Not determined.
9.17	Evaporation Rate:	Not determined.
9.18	Flammability (Solid, Gas):	Not applicable.

The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

10. STABILITY AND REACTIVITY

10.1	Stability:	Stable.
10.2	Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
10.3	Conditions to Avoid:	None.
10.4	Materials to Avoid:	Can react with strong oxidising agents. Water, moisture or humid air can cause hazardous vapors to form.
10.5	Hazardous Decomposition Products:	Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde. Nitrogen oxides. Metal oxides.

11. TOXICOLOGICAL INFORMATION

11.1	Route of Exposure:	Inhalation, skin contact and accidental ingestion.
11.2	Signs and Symptoms of	May cause an allergic skin reaction.

DOW CORNING(R) 3140 RTV COATING

Overexposure:

11.3 Acute Toxicity:

<u>Chemical Name</u>	<u>CAS No.</u>	<u>LD50 (Oral)</u>	<u>LD50 (Dermal)</u>	<u>LC50 (Inhalation)</u>
Trimethylated silica	68909-20-6	> 5,000 mg/kg (Rat)	-	-
Methyltrimethoxysilane	1185-55-3	12.3 ML/KG (Rat)	> 9,500 mg/kg (Rabbit)	> 42.1 MG/L (Rat; 6 Hrs Vapor)
Octamethylcyclotetrasiloxane	556-67-2	> 4,800 mg/kg (Rat)	> 2.5 ML/KG (Rabbit)	2975 PPM (Rat; 4hr vapor)

Eyes:	Direct contact may cause temporary redness and discomfort.
Skin:	Repeated skin contact may cause allergic skin reaction.
Ingestion:	Low ingestion hazard in normal use.
Inhalation:	Vapor and/or mist may irritate nose and throat. Vapor overexposure may cause drowsiness.

11.4 Chronic Toxicity

Skin:	Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis.
Ingestion:	Repeated ingestion or swallowing large amounts may injure internally.
Inhalation:	Prolonged or repeated exposure by inhalation may injure internally.

11.5 Other Health Hazard Information:

This material may liberate methanol upon exposure to moisture or humid air. Overexposure to methanol can result in blindness and nervous system effects.

The above listed potential effects of overexposure are based on actual data, the results of studies performed upon similar compositions, component data, and/or expert review of the products.

12. ECOLOGICAL INFORMATION

12.1 Aquatic and Terrestrial Ecotoxicity

Ecotoxicity Effects:

Acute:	No adverse effects on aquatic organisms.
Chronic:	No adverse effects on aquatic organisms.

Fate and Effects in Waste Water Treatment Plants: No adverse effects on bacteria. Removed > 90% by binding onto sewage sludge. The siloxanes in this product do not contribute to the BOD.

12.2 Persistence and Degradability

Degradation: In soil, siloxanes are degraded.

12.3 Bioaccumulative Potential

Bioaccumulation: No bioaccumulation potential.

Mobility in Soil: Siloxanes are removed from water by sedimentation or binding to sewage sludge.

Additional Environmental Information: Additional environmental information on the silicone component is available on request.

DOW CORNING(R) 3140 RTV COATING

13. DISPOSAL CONSIDERATIONS

- 13.1 Product Disposal:** Dispose of in accordance with local regulations.
- 13.2 Packaging Disposal:** Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

14.1 Road and Rail Transport

Not applicable.

14.2 Sea Transport (IMDG)

Not subject to IMDG code.

14.3 Air Transport (IATA)

Not subject to IATA regulations.

14.4 Special Requirements and Additional Information : None.

15. REGULATORY INFORMATION

- 15.1 Applicable Laws:** Provisions of the Regulations for the Safe Handling of Chemicals in the Workplace
General rule for classification and hazard communication of chemicals [GB 13690-2009]
- 15.2 Chemical Inventories**
- EINECS:** All ingredients listed or exempt.
- TSCA:** All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
- AICS:** All ingredients listed or exempt.
- IECSC:** All ingredients listed or exempt.
- ENCS/ISHL:** All components are listed on ENCS/ISHL or its exempt rule.
- KECL:** All ingredients listed, exempt or notified.
- PICCS:** All ingredients listed or exempt.
- DSL:** All chemical substances in this material are included on or exempted from the DSL.
- HSNO:** All ingredients listed or exempt.

16. OTHER INFORMATION

- 16.1 Contact Point:** Technical Information Center 400 880 7110
- 16.2 Prepared by:** Dow Corning (China) Holding Company Limited

Legend:

- No specific information available

DOW CORNING(R) 3140 RTV COATING

This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

(R) indicates Registered Trademark

Dow Corning[®] 3140 RTV Coating

FEATURES & BENEFITS

- Good flowability
- Room temperature cure
- No added solvents
- UL 94 V-1, IPC-CC-830 and MIL-A-46146 tested
- No mixing required
- Room temperature cure, no ovens required
- Faster in-line processing with optional heat acceleration
- Able to flow, fill or self-leveling after dispensing
- Can be considered for uses requiring added flame resistance, IPC or Mil Spec testing
- UV indicator for manual and automated inspection

COMPOSITION

- One part
- Polydimethylsiloxane adhesive

One-part, translucent adhesive or coating with good flowability, good flame resistance, UL, IPC and Mil Spec tested

APPLICATIONS

Dow Corning[®] 3140 RTV Coating is suitable for:

- Protection of corrosion-sensitive components
- Protection of rigid and flexible circuit boards
- Improved pin/solder joint coverage
- Thin-section encapsulation
- Pin sealing

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Property	Unit	Result
One or Two-Part	-	One
Color	-	Clear to slightly hazy smooth viscous liquid
Viscosity	cP	34,400
	Pa-sec	34.4
Specific Gravity (Cured)	-	1.05
NVC (Non Volatile Content)	%	95.7
Tack-Free Time at 25°C	minutes	116
Tensile Strength	psi	434
Elongation	%	419
Durometer Shore A	-	31.6
Tensile Modulus	psi	103
Unprimed Adhesion – 180 Degree Peel Strength	ppi	40
Dielectric Strength	volts/mil	385
	kV/mm	15
Volume Resistivity	ohm*cm	2.1 x 10 (14)
Dielectric Constant at 100 Hz	-	2.52
Dielectric Constant at 100 kHz	-	2.52
Dissipation Factor at 100 Hz	-	0.004
Dissipation Factor at 100 kHz	-	0.001

TYPICAL PROPERTIES (continued)

Property	Unit	Result
Agency Listing	-	IPC-CC-830B, U: 746
Mil Specification		Mil-I-46058C
UL Flammability Classification	NA	94 V-1 @ 1.4 mm (UL file QMJU2 - E81611)
	NA	94-HB @ 1.9 mm (UL file QMFZ2 – E40195)

DESCRIPTION

Dow Corning® brand one-part moisture cure adhesives are generally cured at room temperature and in an environment of 30 to 80 percent relative humidity eliminating the need for curing ovens and the associated costs of energy and capital. Greater than 90 percent of full physical properties should be attained within 24 to 72 hours and varies according to product. Faster manufacturing throughput can be achieved since the adhesive and component can be handled in much shorter times of about 10 to 120 minutes, depending on the adhesive selected and the amount applied. These adhesives are not typically used in highly confined spaces or where a deep section cure is required as they generally cure from the exposed surface inward at a rate of 0.25 inch per seven days. Cure progresses from the outer exposed surface and is dependent on the moisture in the air. Working time is generally a few minutes to an hour for these products until a surface skin begins to form. Mild heat below 60°C (140°F) may be used to increase through-put by accelerating the cure. *Dow Corning* brand adhesives retain their original physical and electrical properties over a broad range of operating conditions which enhance the reliability and service life of electronic devices.

APPLICATION METHODS

- Brush
- Flow
- Syringe or needle

PACKAGING INFORMATION

Multiple packaging sizes are available for this product. Please contact your local distributor or Dow Corning representative for information on packaging size and availability.

USABLE LIFE AND STORAGE

For best results, *Dow Corning* adhesives should be stored at or below the storage temperature listed on the product label. Special precautions must be taken to prevent moisture from contacting these materials. Containers should be kept tightly closed with head or air space minimized. Partially filled containers should be purged with dry air or other gases, such as nitrogen. 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 its Use Before date as indicated on the product label.

PREPARING SURFACES

All surfaces should be thoroughly cleaned and/or degreased with *Dow Corning*® brand OS Fluids, naphtha, mineral spirits, methyl ethyl ketone (MEK) or other suitable solvent. Solvents such as acetone or isopropyl alcohol (IPA) do not tend to remove oils well, and any oils remaining on the surface may interfere with adhesion. Light surface abrasion is recommended whenever possible,

because it promotes good cleaning and increases the surface area for bonding. A final surface wipe with acetone or IPA is also useful. Some cleaning techniques may provide better results than others; users should determine the best techniques for their particular applications.

SUBSTRATE TESTING

Due to the wide variety of substrate types and differences in substrate surface conditions, general statements on adhesion and bond strength are impossible. To ensure maximum bond strength on a particular substrate, cohesive failure of the product in a lap shear or similar test is needed to ensure compatibility of the adhesive with the substrate being considered. Also, this test can be used to determine minimum cure time or to detect the presence of surface contaminants such as mold release agents, oils, greases and oxide films.

ADHESION

Dow Corning adhesives are specially formulated to provide unprimed adhesion to many reactive metals, ceramics and glass, as well as to selected laminates, resins and plastics. However, good adhesion cannot be expected on non-reactive metal substrates or non-reactive plastic surfaces such as *Teflon*®, polyethylene or polypropylene. Special surface treatments such as chemical etching or plasma treatment can sometimes provide a reactive surface and promote adhesion to these types of substrates

Dow Corning® brand Primers can be used to increase the chemical activity on difficult substrates. Poor adhesion may be experienced on plastic or rubber substrates that are highly plasticized, because the mobile plasticizers act as release agents. Small-scale laboratory evaluation of all substrates is recommended before production trials are made.

USEFUL TEMPERATURE RANGES

For most uses, silicone adhesives should be operational over a temperature range of -45 to 200°C (-49 to 392°F) for long periods of time. However, at both the low and high temperature ends of the spectrum, behavior of the materials and performance in particular applications can become more complex and require additional considerations. For low-temperature performance, thermal cycling to conditions such as -55°C (-67°F) may be possible, but performance should be verified for your parts or assemblies. Factors that may influence performance are configuration and stress sensitivity of components, cooling rates and hold times, and prior temperature history. At the high-temperature end, the durability of the cured silicone elastomer is time and temperature dependent. As expected, the higher the temperature, the shorter the time the material will remain useable.

SOLVENT EXPOSURE

The silicone adhesive discussed in this literature is intended only to survive splash or intermittent exposures. It is not suited for continuous solvent or fuel exposure. Testing should be done to confirm performance of the adhesives under these conditions.

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 WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION.

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 website, 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.

DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

HOW CAN WE HELP YOU TODAY?

Tell us about your performance, design and manufacturing challenges. Let us put our silicon-based materials expertise, application knowledge and processing experience to work for you.

For more information about our materials and capabilities, visit **dowcorning.com**.

To discuss how we could work together to meet your specific needs, email **electronics@dowcorning.com** or go to

dowcorning.com/contactus for a contact close to your location. Dow Corning has customer service teams, science and technology centers, application support teams, sales offices and manufacturing sites around the globe.

*We help you invent the future.*TM

dowcorning.com

道康宁® 3140 RTV (室温固化) 涂料

特性

- 单组分
- 可流动
- 无溶剂型, 室温固化
- 中性固化酒精型
- 和玻璃、陶瓷、金属、硅酮橡胶及多种塑料具有良好的粘结性
- 在 -50℃ ~ +200℃ 下稳定且有弹性 (灰色系涂料, 使用温度更高)
- 半透明
- 弹性橡胶-防机械冲击及部件热冲击
- 优良的介电特性

可流动, MIL-A-46146 硅酮涂料

应用

- 形成持久性涂层以隔开水气及大气中的污染物, 特别用于需要室温固化无溶剂型产品场合。
- 典型应用如下: 缆线终端, 连接器, 晶体振荡器、印刷电路板及薄膜混合电路的涂层。

典型物性

规格制订者: 该数值不用于规格制订, 制订本产品规格前, 请联络您最近当地道康宁销售办事处

CTM*	ASTM*	物性	单位	数值
供货时				
		稠度		可流动
		颜色		透明
0050	D1084	粘度, 23℃ ¹	mPa.s	28,000
		每浸一次, 涂料厚度	mm	0.4
0098		结皮时间	分钟	25
0095		指干时间	小时	1.5
		固化时间-0.5mm厚度	小时	24
		固化时间-3.2mm厚度	小时	72
		完全固化-3.2mm厚度	天	7
0010		非挥发物含量	%	98
在 23℃ 及 50% 相对湿度下固化 7 天后,				
物理性能				
		颜色		透明
0022	D792	比重		1.05
0099	D2240	肖氏硬度	肖氏 A 级	32
0137A	D412	拉伸强度	Mpa	3.1
0137A	D412	断裂伸长率	%	420
0159A	D624	撕裂强度-B型模	kN/m	3.6
0293	D403	剥落强度, 预处理过的铝片	kN/m	4.2
		体积热膨胀系数	1/K	8.8x10 ⁻⁴
		热导系数	W/(m.K)	0.14
在 23℃ 及 50% 相对湿度下固化 7 天后介电性能				
0114	D149	介电强度	kV/mm	18
0112	D150	介电常数, 100Hz		2.52
0112	D150	损耗因子, 100Hz		0.000098
0249	D257	体积电阻系数	Ohm.cm	2.1x10 ¹⁵
		相对显迹指数 (IEC112)		600

1. 布鲁克菲尔德 HAF, 5号转子 10rpm

*CTM: 公司测试方法, CTM 复印本可索取

ASTM: 美国实验与材料学会

应用方法

表面处理

道康宁3140 RTV涂料和大多数金属、玻璃、硅酮树脂、有机树脂、固化硅橡胶清洁干燥表面形成结合。为获得最大粘性，可使用道康宁® 1200S预处理剂或道康宁® 1204 预处理剂。

为获得最佳效果：

- 1.用擦洗布和不含亚麻粗布沾上溶剂如 异丙醇等清洗表面。
- 2.用浸涂、刷涂或喷涂等方法涂上一薄层预处理剂。
- 3.在50%相对湿度下等1小时时间以让预处理剂干燥。
- 4.不要在硅橡胶表面使用预处理剂，仅用砂纸轻微起糙后再用丙酮清洁。

如何使用

道康宁3140RTV涂料为流动性液体，用于部件固定及密封，可用刷涂或浸涂的方法用作印刷电路板或厚膜混合电路板的保护层，可用喷筒操作，另按要求供应所需尺寸塑料喷嘴以方便操作。

需要有关合适的应用设备信息，请联系道康宁公司。

操作和固化时间

暴露于空气中水气时，道康宁3140RTV涂料在室温和相对湿度50%下表面会结皮。在结皮形成前应完成各项操作。在此条件下操作90分钟后，粘结剂/密封剂达到指干状态，进而完全固化。

固化从表面开始再到内层，24小时固化后(室温和50%相对湿度下)，本产品固化厚度为3mm。经7天后才能完全固化并达到最佳物理性能，湿度越低，固化所需时间越长，这种现象在相对湿度低于30%时特别明显。

修复性

涂有道康宁3140RTV涂料的部件涂层可修复，参考资料"硅酮聚合物的去除"，编号10-1148B-01。

操作注意事项

本资料不包括所需的产品安全使用信息。使用前应先阅读产品说明，产品安全资料，产品容器标签上的安全，身体及健康危害资料，可向您当地的道康宁公司销售代表处索取产品安全说明书。

储存与有效期

在30℃以下未开封保存，产品自生产之日起保质期为12个月。

道康宁3140 RTV涂料与空气中水气起反应而固化，不用时应封好容器。贮存时在容器顶部会有由产品同水汽反应形成的塞状物，这个塞状物很容易除掉，不会影响剩余液体的质量。

不需冷冻贮存，但冷冻贮存会延长道康宁3140 RTV涂料的保质期。

包装

道康宁3140 RTV涂料包装为标准工业包装，如需详细信息请联系道康宁公司销售处。

使用限制

本产品未被测试或陈述为适用于医用或药用。

健康和环境信息

为帮助用户安全使用产品，道康宁公司设立了严格的产品服务组织及一组环保，卫生及安全专家来服务客户。

如需进一步信息，请联系当地的道康宁代表。

有限责任-请仔细阅读

本资料是基于道康宁的研究并且被认为是正确的。然而，由于使用本公司产品的条件和方法非我们所能控制，本资料不得用于替代对于本公司产品在被用于规模生产之前就其是否完全满足您特定应用要求所需要的初始测试。因此除非道康宁向您提供一份特定的书面适用性担保。道康宁的唯一担保是该产品满足道康宁现行的销售规格。特别的，道康宁不作其他任何明示的或暗示的担保，并且您能获得的排他性补救和道康宁对违反保证的唯一责任仅限于退还购货价款或替换任何的产品，道康宁明确地声明不承担偶发的或附带性损失的任何责任，我们所提供的使用建议不得被当作侵犯任何专利权的导因。