

道康宁有机硅贸易(上海)有限公司  
物质安全资料表

## DOW CORNING(R) 7091 ADHESIVE SEALANT BLACK

## 一、化学品及企业识别

- 1.1 产品名称: DOW CORNING(R) 7091 ADHESIVE SEALANT BLACK
- 1.2 制造商的产品代码: 02756030
- 1.3 化学品分类: 硅酮弹性体
- 1.4 危险货物分类: 不受限制。
- 1.5 公司介绍:
- 制造商/供应商名称: 道康宁有机硅贸易(上海)有限公司  
地址: 中国上海浦东外高桥保税区德林路268号 邮编 200131  
电话: (86 21)37747110 传真电话: (86 21) 57741162  
ext 1133  
应急电话: (86 21) 57741161  
联络人: 环境、健康和全部经理

## 二、成分/组成信息

- 2.1 化学类别: 混合物
- 2.2 物理形态: 糊状物
- 2.3 颜色: 黑色
- 2.4 主要用途: 密封剂和胶粘剂
- 2.5 危险组分\*:

<u>化学品名称</u>	<u>CAS 编号</u>	<u>% (w/w)</u>	<u>符号&amp; 健康危险术语</u>
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甲基三甲氧基硅烷	1185-55-3	<10	高度易燃的。 有害的。 高度易燃的。 如被吞下是有害的。
甲醇	67-56-1	<1	高度易燃的。 有毒的。 高度易燃的。 通过吸入、皮肤接触及如被吞下是有毒的。 有毒的：通过吸入、皮肤接触及如被吞下会造成非常严重及无法复原的影响的危险。
*依据欧洲 European Commission Directive 1999/45/EC (Article 3 [3])			

### 三、危险性鉴别

- 3.1 **危险性类别:** 无危害性。
- 3.2 **危险性信息:** 无危害性。  
避免接触皮肤及眼睛。  
仅可在通风良好处使用。
- 3.3 **暴露途径:** 皮肤接触 和意外吞食。
- 3.4 **健康危害:**
- 急性影响**
- 眼睛:** 直接接触可能引起轻微的刺激。
- 皮肤:** 单一短时间暴露不会有重大影响。
- 吸入:** 对呼吸系统有轻微的刺激。过分暴露气雾可能引起瞌睡感。
- 食入:** 正常使用时只具很低的摄入危害。
- 慢性影响**
- 皮肤:** 反复或长时间暴露可能引起刺激。反复接触皮肤可能引起过敏性皮肤反应。
- 吸入:** 反复或长时间暴露吸入可能造成内部伤害。
- 食入:** 反复摄入或吞咽大量可能造成内部伤害。
- 3.5 **过分接触的影响和症状:** 正常使用状态下，单次暴露并不会产生危害影响。

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## 四、急救措施

4.1	眼睛:	立即用水冲洗15分钟。
4.2	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。
4.3	吸入:	移至新鲜空气处, 假如症状持续应就医处理。
4.4	食入:	就医处理。
4.5	注释:	根据患者的状况及具体的暴露处理。
4.6	对医生的提示:	对症医治。如果您想进一步地了解信息, 请与道康宁有机硅贸易(上海)有限公司联络。

## 五、消防措施

5.1	燃烧性:	不燃。
5.2	闪点:	不适用。
5.3	引燃温度:	无数据。
5.4	爆炸下限:	无数据。
5.5	爆炸上限:	无数据。
5.6	危险特性:	无。
5.7	灭火剂:	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。
5.8	特殊的灭火程序和设备:	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。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。
5.9	有害的燃烧产物:	二氧化碳及微量的未完全燃烧的碳化物。氧化氮。二氧化硅。金属氧化物。甲醛。
5.10	禁止使用的灭火剂:	未确定。

## 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, 保持容器密封。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。

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<b>6.3 消除方法:</b>	遵守在本物质安全资料表中所列的所有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, 以便回收利用或废弃。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。
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### 七、操作处置与储存

<b>7.1 操作注意事项:</b>	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, 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。
<b>7.2 储存提示:</b>	需谨慎小心, 远离氧化性物料储存。保持容器密封, 储存时避免水或湿气。
<b>7.3 不适合的包装材料:</b>	未确定。

### 八、接触控制/个体防护

<b>8.1 工业卫生标准:</b>										
	<table border="1"> <thead> <tr> <th><u>组分</u></th> <th><u>CAS 编号</u></th> <th><u>接触极限</u></th> </tr> </thead> <tbody> <tr> <td>甲基三甲氧基硅烷</td> <td>1185-55-3</td> <td>道康宁管理标准: TWA 50 ppm; 并且见甲醇注释。</td> </tr> <tr> <td>甲醇</td> <td>67-56-1</td> <td>中国: TWA 25 mg/m<sup>3</sup>. STEL 50 mg/m<sup>3</sup>. 可能会经由皮肤吸收。 OSHA PEL (final rule): TWA 200 ppm, 260 mg/m<sup>3</sup> and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.</td> </tr> </tbody> </table> <p>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。</p>	<u>组分</u>	<u>CAS 编号</u>	<u>接触极限</u>	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。	甲醇	67-56-1	中国: TWA 25 mg/m <sup>3</sup> . STEL 50 mg/m <sup>3</sup> . 可能会经由皮肤吸收。 OSHA PEL (final rule): TWA 200 ppm, 260 mg/m <sup>3</sup> and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.
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<b>8.2 工程控制</b>										
<b>局部通风设备:</b>	建议使用。									
<b>普通通风设备:</b>	建议使用。									

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#### 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,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。

**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:** 糊状物
- 9.2 颜色:** 黑色
- 9.3 气味:** 未呈报。
- 9.4 pH 值:** 无数据。

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9.5	溶解性:	无数据.
9.6	沸点:	无数据.
9.7	熔点:	无数据.
9.8	闪点:	不适用.
9.9	引燃温度:	无数据.
9.10	爆炸性:	否
9.11	氧化性:	否
9.12	蒸气压(25°C):	无数据.
9.13	比重:	1.39
9.14	辛醇/水分配系数:	无数据.
9.15	相对蒸气压(空气=1):	无数据.
9.16	粘度:	无数据.
9.17	分子量:	未评估.

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	反应性	
	避免接触的条件:	无。
	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。
	分解产物:	二氧化碳及微量的未完全燃烧的碳化物。氧化氮。二氧化硅。金属氧化物。甲醛。
	聚合危害:	不会产生危害的聚合反应。

## 十一、毒理学资料

11.1	健康危害:	参阅章节 3.4。
11.2	致敏性:	未知。
11.3	致突变性:	未知。
11.4	致生殖遗传性:	未知。
11.5	致癌性:	未知。
11.6	其它健康危害信息:	无适合的资料。

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。

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#### 十二、生态学资料

##### 12.1 环境影响及其分布:

固体物品,不能溶解于水中。不能预示的有害影响。

##### 12.2 环境影响:

不能预示对水生有机体的有害影响。

**生物积累性:** 无生物累积能力。

##### 12.3 对污水处理厂的影响:

不能预示对细菌的有害影响。

#### 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:

不受限制。

##### 14.2 海运 (IMDG):

不属 IMDG 编码。

##### 14.3 空运 (IATA):

不属 IATA 规定。

#### 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], 针对化学危险品的安全使用、生产、储存、运

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输、装卸等方面均作了相应规定。

#### 15.2 化学品库存:

<b>AICS:</b>	所有组成份均列出或予以免除。
<b>DSL:</b>	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。
<b>EINECS:</b>	所有组成份均列出或予以免除。
<b>IECSC:</b>	所有组成份均列出或予以免除。
<b>KECL:</b>	所有成份均被列出、予以免除或公告。
<b>MITI:</b>	所有组成份均列入 ENCS 或它的免除规定中。
<b>PICCS:</b>	请洽商当地道康宁公司。
<b>TSCA:</b>	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。

#### 十六、其他信息

联络处: 技术信息中心 (86 21)37747110 ext 1133  
制作者: 道康宁有机硅贸易(上海)有限公司

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 CORPORATION  
Material Safety Data Sheet****DOW CORNING(R) 7091 ADHESIVE SEALANT BLACK****1. PRODUCT AND COMPANY IDENTIFICATION**

Dow Corning Corporation  
South Saginaw Road  
Midland, Michigan 48686

**24 Hour Emergency Telephone: (989) 496-5900**

Customer Service: (989) 496-6000

Product Disposal Information: (989) 496-6315

CHEMTREC: (800) 424-9300

MSDS No.: 01781081

Revision Date: 2010/02/12

Generic Description: Silicone elastomer

Physical Form: Paste

Color: Black

Odor: Not available

NFPA Profile: Health 1 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

**2. HAZARDS IDENTIFICATION****POTENTIAL HEALTH EFFECTS****Acute Effects**

Eye: Direct contact may cause temporary redness and discomfort.

Skin: No significant irritation expected from a single short-term exposure.

Inhalation: Irritates respiratory passages very slightly.

Oral: Low ingestion hazard in normal use.

**Prolonged/Repeated Exposure Effects**

Skin: Repeated or prolonged exposure may cause irritation.

Inhalation: Prolonged or repeated exposure by inhalation may injure internally.

Oral: Repeated ingestion or swallowing large amounts may injure internally.

**Signs and Symptoms of Overexposure**

No known applicable information.

**Medical Conditions Aggravated by Exposure**

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions,

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component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

None present. This is not a hazardous material as defined in the OSHA Hazard Communication Standard.

**4. FIRST AID MEASURES**

Eye:	If irritation occurs, flush eye(s) with lukewarm gently flowing water for 5 minutes. Obtain medical attention.
Skin:	No health effects expected. If irritation does occur flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.
Inhalation:	Remove from the source of contamination or move to fresh air. If irritation persists, obtain medical advice.
Oral:	If irritation or discomfort occur, obtain medical advice.
Notes to Physician:	Treat according to person's condition and specifics of exposure.

**5. FIRE FIGHTING MEASURES**

Flash Point:	> 212 °F / > 100 °C (Closed Cup)
Autoignition Temperature:	Not determined.
Flammability Limits in Air:	Not determined.
Extinguishing Media:	On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO <sub>2</sub> ), dry chemical or water spray. Water can be used to cool fire exposed containers.
Fire Fighting Measures:	Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Unusual Fire Hazards:	None.

**6. ACCIDENTAL RELEASE MEASURES**

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**Containment/Clean up:** Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. 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. Local, state and federal 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 federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

**7. HANDLING AND STORAGE**

Use with adequate ventilation. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self-contained breathing apparatus. Avoid eye contact. Avoid skin contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally.

Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Component Exposure Limits**

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.

**Engineering Controls**

Local Ventilation: Recommended.  
General Ventilation: Recommended.

**Personal Protective Equipment for Routine Handling**

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Washing at mealtime and end of shift is adequate.

Suitable Gloves: Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.

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**Inhalation:** 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:** General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

#### Personal Protective Equipment for Spills

**Eyes:** Use full face respirator.

**Skin:** Washing at mealtime and end of shift is adequate.

**Inhalation/Suitable Respirator:** Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

**Precautionary Measures:** Avoid eye contact. Avoid skin 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 exposure within Section 8 guidelines or use air-supplied or self-contained breathing apparatus.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Paste  
 Color: Black  
 Odor: Not available  
 Specific Gravity @ 25°C: 1.39  
 Viscosity: Not determined.  
 Freezing/Melting Point: Not determined.  
 Boiling Point: Not determined.  
 Vapor Pressure @ 25°C: Not determined.  
 Vapor Density: Not determined.  
 Solubility in Water: Not determined.  
 pH: Not determined.  
 Volatile Content: Not determined.  
 Flash Point: > 212 °F / > 100 °C (Closed Cup)  
 Autoignition Temperature: Not determined.

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Flammability Limits in Air: Not determined.

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

**10. STABILITY AND REACTIVITY**

Chemical Stability: Stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: None.

Materials to Avoid: Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Metal oxides. Formaldehyde. Silicon dioxide.

**11. TOXICOLOGICAL INFORMATION**Component Toxicology Information

This material contains methyltrimethoxysilane (MTMS). MTMS was evaluated in a combined repeated-dose toxicity study with the reproduction/developmental toxicity screening test (OECD 422). Sprague-Dawley rats were gavaged daily at dose levels of 0, 50, 250, and 1000 mg MTMS (in corn oil)/kg body weight. Test article-related effects were seen in one or both sexes at the two top dose levels (unless otherwise noted) and included (but not limited to): increased liver weights; increased incidence of hyperplasia and/or hypertrophy in the liver, thyroid and adrenals (high dose only); acanthocytosis (high dose only); increased prothrombin time; elevations in blood platelet count (high dose only), serum total protein and cholesterol. The no observed adverse effect level (NOAEL) was determined to be 50 mg/kg/day for parental toxicity and 1000 mg/kg/day for effects on reproductive performance and on developmental toxicity.

In a 90-day study, five (5) groups of 10 male and 10 female Sprague-Dawley rats were exposed to target methyltrimethoxysilane concentrations of 0 (control), 25, 100, 400 and 1600 ppm for groups 1 through 5, respectively, for six hours per day, five days per week. Additional satellite groups of 10 males and 10 females were included in the 0 and 1600 ppm exposure groups for evaluation of a 28-day post-exposure recovery period. Based on the grossly observed urinary bladder calculi and kidney dilation at the 400 and 1600 ppm exposure levels, the No Observable Effect Level (NOEL) for methyltrimethoxysilane was 100 ppm.

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

Special Hazard Information on Components

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No known applicable information.

**12. ECOLOGICAL INFORMATION**

**Environmental Fate and Distribution**

**Air:** This product is a solid consisting of a high molecular weight silicone polymer and other solid materials. Unless milled to produce a dust or particles, it is unlikely to give rise to atmospheric contamination.

**Water:** This product is a solid which is completely insoluble in water. As the specific gravity is >1, it will sink to the bottom of the water course.

**Soil:** This product will enter the terrestrial environment if, as a component of municipal or industrial solid waste the product is landfilled. It is unlikely that further significant transformation of the product will occur.

**Degradation:** High molecular weight polymer which is amenable to recycling. The product is not biodegradable. The product is removed >80% during the sewage treatment process.

**Environmental Effects**

**Toxicity to Water Organisms:** This product has low water solubility and should not present a risk to aquatic organisms.

**Toxicity to Soil Organisms:** This product is a solid and does not contain significant concentrations of water soluble constituents that may be leached from the product. It is therefore not likely to present a danger to terrestrial organisms.

**Bioaccumulation:** This product is a solid which is not soluble in water and if ingested will not be absorbed.

**Fate and Effects in Waste Water Treatment Plants**

This product is a solid rubber type material which is unlikely to have any adverse effect on bacteria.

**Ecotoxicity Classification Criteria**

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

**13. DISPOSAL CONSIDERATIONS**

**RCRA Hazard Class (40 CFR 261)**

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When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal. Call (989) 496-6315, if additional information is required.

**14. TRANSPORT INFORMATION****DOT Road Shipment Information (49 CFR 172.101)**

Not subject to DOT.

**Ocean Shipment (IMDG)**

Not subject to IMDG code.

**Air Shipment (IATA)**

Not subject to IATA regulations.

Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

**15. REGULATORY INFORMATION**

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

**EPA SARA Title III Chemical Listings****Section 302 Extremely Hazardous Substances (40 CFR 355):**

None.

**Section 304 CERCLA Hazardous Substances (40 CFR 302):**

None.

**Section 311/312 Hazard Class (40 CFR 370):**

Acute: No  
Chronic: Yes  
Fire: No  
Pressure: No  
Reactive: No

**Section 313 Toxic Chemicals (40 CFR 372):**

None present or none present in regulated quantities.

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Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

**Supplemental State Compliance Information****California**

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

**Massachusetts**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
471-34-1	40.0 - 70.0	Calcium carbonate
1333-86-4	1.0 - 5.0	Carbon black

**New Jersey**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
471-34-1	40.0 - 70.0	Calcium carbonate
70131-67-8	30.0 - 60.0	Dimethyl siloxane, hydroxy-terminated
63148-62-9	10.0 - 30.0	Polydimethylsiloxane
1185-55-3	1.0 - 5.0	Methyltrimethoxysilane
1333-86-4	1.0 - 5.0	Carbon black

**Pennsylvania**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
471-34-1	40.0 - 70.0	Calcium carbonate
70131-67-8	30.0 - 60.0	Dimethyl siloxane, hydroxy-terminated
63148-62-9	10.0 - 30.0	Polydimethylsiloxane
1333-86-4	1.0 - 5.0	Carbon black



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**DOW CORNING(R) 7091 ADHESIVE SEALANT BLACK****16. OTHER INFORMATION**

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either 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

## 产品信息

# 道康宁® 7091

## 粘合剂/密封胶

### 高性能中性固化有机硅粘合剂/密封胶

#### 特性

- 单组分粘合剂/密封胶
- 当暴露于空气中水分时室温固化
- 脱醇固化
- 不垂流，粘膏状
- 易于应用
- 固化形成柔韧的橡胶
- 对多种基材有出色的粘合性
- 从-55 (-67 )到 +180 (+356 )保持稳定和柔韧

#### 应用

- 专为需要强劲及柔韧粘合的应用设计，如玻璃和金属或玻璃和塑料的具有不同热膨胀率的材料粘结。
- 为常用材料提供无底漆粘合，如上釉和涂漆钢材、铝材、陶瓷和玻璃，也包括工程应用中的某些塑料。
- 用作就地成型垫片 (FIPG) 材料。

#### 典型物性

规格制订者：以下数值并非用于规格制订，制订本产品规格前，请联络您当地的道康宁销售办事处或全球办事处。

CTM* ASTM*	参数	单位	数值
	供货时		
	外观		不垂流粘膏
	颜色		黑色，白色，灰色
0364 D2452	挤出速度 <sup>1</sup>	g/分	350
0098	表干时间	分钟	15
0095 MIL-S-8802E	指干时间 <sup>2</sup>	分钟	28
	<b>机械性能，在23°C (73°F)，50%相对湿度空气中固化7天</b>		
099 D2240	硬度，邵尔A		37
0137A D412	拉伸强度	MPa	2.5
0137A D412	断裂延伸率	%	680
0137A D412	撕裂强度 – die B	kN/m	15
0022 D0792	比重，22 (72 )		1.4
	<b>粘合，23°C (73°F)，50%相对湿度固化7天</b>		
	在金属、玻璃、ABS、聚碳酸酯、云母填充聚丙烯冠状化合物处理过的、耐划涂层塑料上可获得 100% 内聚失败。（表示粘结性能好）		

1. 利用 3.18mm 直径的喷嘴在 0.62Mpa 下测定挤出速度
2. 指干时间是产品粘合于聚乙烯膜产生不粘表面所需的时间

\* CTM: 公司测试方法，可索取 CTM 复本。

ASTM: 美国测试与材料协会。

#### 如何使用

##### 基材准备

所有的表面必须干净和干燥。去除油脂并且清洗掉任何可能损害粘合的污物。合适的溶剂包括异丙醇、丙酮、甲乙酮。

在多种基材上可以获得良好的无底漆粘合，包括上釉和涂漆钢材、铝材、陶瓷、玻璃和某些塑料。不能获得良好粘合效果的基材包括 PTFE、聚乙烯、聚丙烯及相关材料。

为了获得最好的粘合效果，推荐使用道康宁® 1200 OS底漆。在用溶剂清理干净后通过蘸涂、刷涂或喷涂形成道康宁®1200 OS薄层。使底漆在室温50%或更高相对湿度下干燥15到90分钟。

## 如何应用

在一块准备好的表面上滴上道康宁7091粘合剂/密封胶（参照操作注意事项），然后迅速盖上另一块需要粘合的基材。

在接触水汽的情况下，新应用的材料在室温、50%相对湿度下在10—15分钟内表干。任何操作都必须在表干以前完成，用抹刀可以方便的对表面进行处理。粘合剂/密封胶大约在30分钟内达到指干。

## 固化时间

结皮后，从表面向内继续固化。在24小时内(在室温，50%相对湿度下)，道康宁7091粘合剂/密封胶将固化大约2mm的深度。极深层，特别空气中的水汽难以达到的地方，将需要更长时间达到完全固化。在湿度较低时固化时间更长。在处理 and 包装粘合过的部件时，建议使用者等待足够长的时间，以保证粘合密封不受影响。这取决于很多因素，对于每一种特定应用，应由使用者自行确定。

## 操作注意事项

当使用溶剂时，避免接触皮肤和眼睛、热源、火花和明火。一直保持充分通风。从溶剂供应商获得并遵守操作注意事项。

本资料不包括安全使用本产品所需的安全信息。使用前，请阅读产品及其安全数据表以及容器标签，以获取有关产品的安全使用、危害身体及健康的资料。可从道康宁公司的网站[www.dowcorning.com](http://www.dowcorning.com)上查阅产品的安全数据表，也可以从当地的道康宁销售代表处或经销商处索取，或致电道康宁公司全球办事处。

## 保质期和存储

在 30°C (86°F)以下未开封保存时，产品自生产之日起保质期为12个月。

## 包装

本产品有310ml筒装、20升桶装和250kg圆桶装。

## 使用限制

在低（表面）能塑料如聚乙烯、聚丙烯和PTFE上粘合成功率较低。使用者应在每次特定应用时进行预先测试，以获得满意的结果。

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（PS&RC）专家来服务客户。

有关详情，请访问我们的网站<http://www.dowcorning.com>或咨询当地的道康宁代表。

## 有限保证信息 – 请仔细阅读

此处提供的信息是准确无误的。然而，由于使用本公司产品的条件和方法非我们所能控制，本信息不能取代客户为确保道康宁产品安全、有效、并完全满足于特定的最终用途，而进行的测试。我们所提供的使用建议，不得被视为侵犯任何专利权的导因。

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# DOW CORNING® 7091 Adhesive/Sealant

## High performance neutral cure silicone adhesive/sealant

### FEATURES

- One-component adhesive/sealant
- Cures at room temperature when exposed to moisture in the air
- Alkoxy cure system
- Non-sag, paste consistency
- Easy to apply
- Cures to a tough, flexible rubber
- Excellent adhesion to many substrates
- Stable and flexible from -55°C (-67°F) to +180°C (+356°F)

### APPLICATIONS

- Designed for applications which demand a strong but flexible bond, such as when bonding materials with differing thermal expansion rates, e.g. glass to metal or glass to plastic.
- Unprimed adhesion to commonly used materials including enamelled and painted steel, aluminum, ceramic and glass as well as to certain plastics used in engineering applications.
- Used as a Formed-in-Place Gasket (FIPG) material.

### TYPICAL PROPERTIES

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

CTM*	ASTM*	Property	Unit	Value
<b>As supplied</b>				
		Appearance		Non-slump paste
		Colors		Black, white, gray
0364	D2452	Extrusion rate <sup>1</sup>	g/minute	350
0098		Skin-over time	minutes	15
0095	MIL-S-8802E	Tack-free time <sup>2</sup>	minutes	28
<b>Mechanical properties, cured 7 days in air at 23°C (73°F) and 50% relative humidity</b>				
0099	D2240	Durometer hardness, Shore A		37
0137A	D412	Tensile strength	MPa	2.5
0137A	D412	Elongation at break	%	680
0137A	D412	Tear strength - die B	kN/m	15
0022	D0792	Specific gravity at 22°C (72°F)		1.4
<b>Adhesion cured 7 days at 23°C (73°F) and 50% relative humidity</b>				
100% Cohesive failure is obtained on metals and glass but also on ABS, polycarbonate, talc-filled polypropylene-corona treated, anti-scratch coated plastic				

1. Extrusion rate measured using 3.18mm diameter nozzle at 0.62MPa.

2. Tack-free time is the time required for the product to develop a non-tacky surface based on adhesion to a polyethylene film.

\* CTM: Corporate Test Method, copies of CTMs are available on request.

ASTM: American Society for Testing and Materials.

### HOW TO USE

#### Substrate preparation

All surfaces must be clean and dry. Degrease and wash off any contaminants that could impair adhesion. Suitable solvents include

isopropyl alcohol, acetone or methyl ethyl ketone.

Good unprimed adhesion may be obtained on a variety of substrates, including enamelled and painted steel,

aluminum, ceramic, glass and certain plastics. Substrates to which good adhesion is normally not obtained include PTFE, polyethylene, polypropylene and related materials.

For maximum adhesion, the use of DOW CORNING® 1200 OS Primer is recommended. After solvent cleaning apply a thin coat of DOW CORNING 1200 OS Primer by dipping, brushing or spraying. Allow primer to dry for 15 to 90 minutes at room temperature and a relative humidity of 50% or higher.

### **How to apply**

Apply a bead of DOW CORNING 7091 Adhesive/Sealant (see Handling Precautions) to one of the prepared surfaces, then quickly cover with the other substrate to be bonded.

On exposure to moisture, the freshly applied material will "skin-over" in about 10-15 minutes at room temperature and 50% relative humidity. Any tooling should be completed before this skin forms. The surface is easily tooled with a spatula. The adhesive/sealant will be tack-free in approximately 30 minutes.

### **Cure time**

After skin formation, cure continues inward from the surface. In 24 hours (at room temperature and 50% relative humidity) DOW CORNING 7091 Adhesive/Sealant will cure to a depth of about 2mm. Very deep sections, especially when access to atmospheric moisture is restricted, will take longer to cure completely. Cure time is extended at lower humidity levels. Before handling and packaging bonded components, users are advised to wait a sufficiently long time to ensure that the integrity of the adhesive seal is not affected. This will depend on many factors and should be determined by the user for each specific application.

### **HANDLING PRECAUTIONS**

When using solvents avoid contact with skin and eyes, heat, sparks and open flames. Always provide adequate ventilation. Obtain and follow handling precautions from the solvent supplier.

Product safety information required for safe use is not included. Before handling, read product and 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 [www.dowcorning.com](http://www.dowcorning.com). You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

### **USABLE LIFE AND STORAGE**

When stored at or below 30°C (86°F) in the original unopened containers, this product has a usable life of 12 months from the date of production.

### **PACKAGING**

This product is available in 310ml cartridges, 20 liter pails and 250kg drums.

### **LIMITATIONS**

Adhesion may be less successful on low-energy plastics such as Polyethylene, Polypropylene and PTFE. Users should do preliminary tests in each specific application to ensure satisfactory results.

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, [www.dowcorning.com](http://www.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 Dow Corning's 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 the product will meet the Dow Corning 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.**

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