

TSE3941-W-CART-(300ML-495G)-WHITE

安全技术说明书

1. 化学品及企业标识

化学品名称: 硅酮密封胶 TSE3941-W

化学品的推荐用途和限制用途

推荐用途: 密封剂

限制用途: 未知。

制造商或供应商名称、地址及电话

制造商/进口商/经销商信息 : 迈图(上海)贸易有限公司
上海市浦东新区张江高科技园区李冰路 227 号
邮编: 201203
中国

联络人 : Productstewardship-GC@momentive.com

电话 : +86-21-3860-4500

传真号码 : +86-21-5079-3707

应急电话号码 : +86-532-8388-9090 (国家安全生产监督管理局化学品登记中心)
+86-10-5100-3039 (CareChem24)

责任部门 : 产品安全监管

2. 危险性概述

紧急情况概述

外观

颜色: 白色

硅酮密封胶 TSE3941-W

性状:	浆糊, 糊剂
物理状态:	固体
气味:	微弱的气味
危险性说明:	造成严重眼刺激。 对皮肤有轻度刺激。 可能导致皮肤过敏反应 可能对生育能力或胎儿造成伤害。 长期或重复接触可能对器官造成伤害。

物质或混合物的 GHS 分类, 以及国家或地区信息

健康危害

皮肤腐蚀/刺激	类别 3
严重眼损伤/眼刺激	类别 2A
皮肤敏化作用	类别 1
生殖毒性	类别 1B
生殖毒性	类别 1B
特定目标器官毒性 反复接触	类别 2

GHS 标签要素

象形图:



警示词:

危险

危险性说明:

造成严重眼刺激。
对皮肤有轻度刺激。
可能导致皮肤过敏反应
可能对生育能力或胎儿造成伤害。
长期或重复接触可能对器官造成伤害。

防范说明:

硅酮密封胶 TSE3941-W

- 预防措施:** 在使用前获取特别指示。在读懂所有安全防范措施之前切勿搬动。戴防护手套/穿防护服/戴防护眼罩/戴防护面具。请勿吸入粉尘 处理后要彻底洗手 受沾染的工作服不得带出工作场地。
- 事故响应:** 如感觉不适, 须求医/就诊。如接触到或有疑虑: 求医/就诊。如皮肤沾染: 用大量水清洗。脱掉污染的衣服, 并且在重新使用前清洗。如发生皮肤刺激或皮疹: 如进入眼睛: 用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出, 取出隐形眼镜。继续冲洗。如仍觉眼刺激:
- 安全储存:** 存放处须加锁。
- 废弃处置:** 在适合的处置和废弃设施内, 按照可用的法律法规要求, 以及废弃时的产品特性, 废弃处置内容物/容器。
- 没有分类的其他危害:** 无。
- 补充标签内容** 无。

3. 成分/组成信息

化学性质: 有机硅混合物

混合物

成分名称	化学文摘登记号(CAS No.)	含量百分比 (%) *
石英	14808-60-7	30 - 60%
二氧化钛	13463-67-7	<10%
甲氧基封端的环戊基硅氮烷-氨基硅氧烷共聚物	134759-20-9	<10%
二月桂酸二丁基锡	77-58-7	<1%

* 除气体外, 所有组分的浓度均为重量百分比。气体浓度是体积百分比。

硅酮密封胶 TSE3941-W

4. 急救措施

不同接触方式的急救措施

吸入:	若吸入，转移患者至空气新鲜处并就医。
皮肤接触:	用大量肥皂和水清洗。
眼睛接触:	万一接触眼睛，立即用大量水冲洗并征求医生意见。
食入:	立即呼叫医生或毒物控制中心。仅在医务人员指导下催吐。绝对不能给无意识的人员口服任何物品。
急救人员的个体防护:	无可得到的数据

最重要的症状/效应，急性延迟

症状:	对症治疗和辅助治疗。
危害:	无可得到的数据
对医生的提示	
处理:	无可得到的数据

5. 消防措施

一般火灾危险: 移去可燃物。使用上述列出的灭火介质灭火。

灭火方法

适用的灭火剂: 用泡沫、二氧化碳或干粉来灭火。

不适用的灭火剂: 无可得到的数据

化学品产生的特别危险性: 无可得到的数据

消防员的特殊防护设备和防范措施

特殊灭火程序: 无可得到的数据

消防员的特殊防护设备: 使用个人防护设备。

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6. 泄漏应急处理

- 作业人员防护措施、防护装备和应急处置程序:** 未佩戴防护用具的人员禁止靠近。消除点火源。使用个人防护设备。位于上风向。
- 对非应急人员:** 禁止排放到下水道、水路或地面上。
- 对应急人员:** 禁止排放到下水道、水路或地面上。
- 环境保护措施:** 禁止排放到下水道、水路或地面上。
- 收容、清除方法以及所使用的处置材料:** 若大量溢出, 使用沙子或沙袋防止溢出, 然后放置到空容器中以备回收。若少量溢出, 用擦或惰性物质浸透吸收, 再放置到空容器中以备回收。
- 通告程序:** 消除点火源。

7. 操作处置与储存

- 操作注意事项:** 远离火源, 禁止吸烟。
- 储存注意事项:** 温度范围为 5 ~ 25 °C 保持容器密闭。

8. 接触控制和个体防护

控制参数

职业接触限值

成分名称	类型	容许浓度	来源
石英	TWA	0.7 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)

硅酮密封胶 TSE3941-W

	TWA	1 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)
	TWA	0.3 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)
	TWA	0.7 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)
	TWA	0.5 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)
	TWA	0.2 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)
二氧化钛	TWA	8 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)
二月桂酸二丁基锡	TWA	0.1 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)
	STEL	0.2 mg/m ³	工作场所有害因素职业接触限值 化学有害因素 (GBZ 2.1) (03 2008)

生物限值

所有组份均没有指定曝露限度

适当的工程控制:

通风良好的区域。

个体防护措施, 如个体防护设备

一般信息:

穿戴适当的防护服、手套和眼罩/面罩

眼睛/面部防护:

带侧防护罩的安全眼镜

皮肤和身体防护

手防护:

橡胶或塑胶手套

其他:

耐化学物质衣物 穿橡胶防护靴。

呼吸系统防护:

带有机蒸气滤毒罐、粉尘和雾气过滤器的防毒面具。

卫生措施:

避免接触眼睛、皮肤和衣物。使用后需洗手。使用时, 不得进食, 饮水。

硅酮密封胶 TSE3941-W

9. 理化特性

外观

物理状态:	固体
性状:	浆糊, 糊剂
颜色:	白色
气味:	微弱的气味
气味阈值:	无可得到的数据
pH 值:	无可得到的数据
熔点/凝固点:	不适用。
初沸点和沸程:	不适用。
闪点:	> 90 °C
蒸发速率:	无可得到的数据
易燃性 (固体、气体):	无可得到的数据
燃烧上限/下限或爆炸限值	
燃烧极限 - 上限 (%):	无可得到的数据
燃烧极限 - 下限 (%):	无可得到的数据
爆炸极限-上限 (%):	无可得到的数据
爆炸极限-下限 (%):	无可得到的数据
蒸气压:	无可得到的数据
蒸气密度:	无可得到的数据
密度:	1.7 g/cm ³ (23 °C)
相对密度:	无可得到的数据
溶解度	
在水中的溶解度:	不溶解的
溶解度 (其它):	无可得到的数据
分配系数 (辛醇/水) Log Pow:	无可得到的数据
自燃温度:	无可得到的数据
分解温度:	如按指导的方法贮存和使用不会分解。

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SADT:	无可得到的数据
动力粘度:	无可得到的数据
运动粘度:	无可得到的数据
比重:	无可得到的数据

10. 稳定性和反应性

反应性:	无可得到的数据
化学稳定性:	正常条件下物料稳定。
可能的危险反应:	无可得到的数据
避免接触的条件:	与水反应生成少量甲醇。与水反应释放少量氨。
禁配物:	在强酸或碱的催化下会发生聚合或分解。
危险的分解产物:	二氧化碳 甲醛。 二氧化硅 氮氧化物 氨。 该材料含有甲基聚硅氧烷，当温度接近及高于 300°F (150°C) 且空气中含有氧气时，甲基聚硅氧烷能产生甲醛。 甲醛为一种皮肤和呼吸致敏剂、眼睛和喉咙刺激物、急性毒物并有可能致癌的危险。 Momentive 可以提供甲醛的 MSDS。
其他信息:	无可得到的数据

11. 毒理学信息

可能的接触途径信息

吸入:	无可得到的数据
皮肤接触:	无可得到的数据
眼睛接触:	无可得到的数据
食入:	无可得到的数据

与物理，化学和毒理特性相关的症状

吸入:	无可得到的数据
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硅酮密封胶 TSE3941-W

皮肤接触: 无可得到的数据

眼睛接触: 无可得到的数据

食入: 无可得到的数据

毒理学效应信息

急性毒性

口服

产品: 无可得到的数据

指定物质:

二氧化钛 LD 50 (大鼠): > 10,000 mg/kg

甲氧基封端的环戊基硅氮 LD 50 (大鼠): 4,666 mg/kg

烷-氨基硅氧烷共聚物

二月桂酸二丁基锡 LD 50 (大鼠): 2,071 mg/kg

皮肤

产品: 无可得到的数据

指定物质:

二氧化钛 LD 50 (兔): > 10,000 mg/kg

二月桂酸二丁基锡 LD 50 (大鼠): 750 mg/kg

LD 50 (大鼠): 1,000 mg/kg

LD 50 (大鼠): > 2,000 mg/kg

吸入

硅酮密封胶 TSE3941-W

产品: 无可得到的数据

指定物质:

二氧化钛 LC50 (大鼠, 4 h): > 6.8 mg/l

二月桂酸二丁基锡 LC50 (大鼠, 2.00 h): 10 mg/l

重复剂量中毒

产品: 无可得到的数据

皮肤腐蚀和刺激

产品: 无可得到的数据

严重眼损伤/眼刺激

产品: 无可得到的数据

指定物质:

二氧化钛 无眼睛刺激

甲氧基封端的环戊基硅 眼睛刺激性试验 (兔, 24 h): 具腐蚀性 对眼睛有严重损害的风险。

氮烷-氨基硅氧烷共聚物

二月桂酸二丁基锡 OECD 试验导则 405 (兔, 21 d): 具强刺激性。 刺激眼睛。

呼吸或皮肤过敏

产品: 无可得到的数据

致癌性

产品: 无可得到的数据

硅酮密封胶 TSE3941-W

生殖细胞致突变性

在试管内

产品: 无可得到的数据

活体内

产品: 无可得到的数据

生殖毒性

产品: 无可得到的数据

特定目标器官毒性 一次接触

产品: 无可得到的数据

特定目标器官毒性 反复接触

产品: 无可得到的数据

吸入危害

产品: 无可得到的数据

其它影响:

无可得到的数据

12. 生态学信息

生态毒性

急性危害水生环境

鱼

产品: 无可得到的数据

水生无脊椎动物

产品: 无可得到的数据

指定物质:

二月桂酸二丁基锡 半致死有效浓度 (EC50) (大型蚤, 48 h): < 0.463 mg/l 淡水

对水生环境有慢性危害

硅酮密封胶 TSE3941-W

鱼

产品: 无可得到的数据

水生无脊椎动物

产品: 无可得到的数据

对水生植物的毒性

产品: 无可得到的数据

持久性和降解性

生物降解

产品: 无可得到的数据

BOD/COD 比值

产品: 无可得到的数据

潜在的生物累积性

生物浓度因子 (BCF)

产品: 无可得到的数据

n-辛醇/水分配系数 (log Kow)

产品: 无可得到的数据

迁移性

土壤中的迁移性: 无可得到的数据

已知或预计会分布到环境隔室中

石英 无可得到的数据

二氧化钛 无可得到的数据

甲氧基封端的环戊基硅氮烷- 无可得到的数据

氨基硅氧烷共聚物

二月桂酸二丁基锡 无可得到的数据

硅酮密封胶 TSE3941-W

其它不良影响: 无可得到的数据

13. 废弃处置

废弃处置方法

废弃处置指导: 符合当地和国家的规定。

污染包装物: 作为未用过的产品处置。

14. 运输信息

国家有关规定

中国

未受管制。

IATA

未受管制。

IMDG

未受管制。

按照 MARPOL 73/78 的附录 II 和 IBC 准则散装运输

不适用

运输注意事项: 依照国家和国际的危险品运输法规，该产品未被列为危险货物。防潮。远离食品和动物饲料

15. 法规信息

国家有关规定

下列条例、法规和标准，对化学产品的使用、操作、储存、运输、分类和标示等方面均作了规定

硅酮密封胶 TSE3941-W

危险化学品安全管理条例，第 591 号令

危险化学品目录 (2015 版)

工作场所安全使用化学品规定

使用有毒物品作业场所劳动保护条例

GB/T 16483: 《化学品安全技术说明书--内容和项目顺序》

化学品安全技术说明书编写指南 (GB/T 17519)

GB15258: 《化学品安全标签编写规定》

化学品分类和标签规范 (GB 30000.2 - GB 30000.29)

GB 13690: 《化学品分类和危险性公示通则》

GB 12268: 《危险货物物品名表》

GB 6944: 《危险货物分类和品名编号》

GB 190 《危险货物包装标志》

GBZ 2.1 《工作场所有害因素职业接触限值第1部分化学有害因素》

国际法规

蒙特利尔协议

不适用

斯德哥尔摩公约

不适用

鹿特丹公约

不适用

京都议定书

硅酮密封胶 TSE3941-W

不适用

物质名录:

AICS (澳洲化学物质目录):	q (限制量)
DSL (加拿大国内化学物质目录):	q (限制量)
EINECS (欧洲现有上市化学物质名录):	y (列入或豁免)
ENCS (日本现有&新的化学物质目录):	y (列入或豁免)
IECSC (中国现有化学物质名录):	y (列入或豁免)
KECI (韩国现有化学物质目录):	y (列入或豁免)
NDSL (加拿大非国内化学物质目录):	n (未列入)
PICCS (菲律宾化学品和化学物质目录):	y (列入或豁免)
TSCA (美国毒性物质控制法):	y (列入或豁免)
新西兰化学物质名录:	n (未列入)
CSNN (台湾既有化学物质名录):	y (列入或豁免)

16.其他信息

发布日期:	2016/07/07
修订日期:	
版本 #:	1.3
补充信息:	穿戴适当的防护服、手套和眼罩/面罩
参考文献:	无可得到的数据

硅酮密封胶 TSE3941-W

免责声明:

读者注意事项

除非在第 1 部分另有规定，迈图产品仅用于工业应用。

它们并不有意的用于特定医疗应用，既不用于长效 (>30 天) 植入人体，直接注射或吸入，也不用于生产多种可用避孕产品。

进一步的信息

穿戴适当的防护服、手套和眼罩/面罩

此安全技术说明书提供的信息在其发布之日是准确无误的，所给出的信息仅作为安全搬运，储存，运输，处理等的指导，而不能被作为担保和质量指标，此信息仅用于指定的物质而不能用于其它相关的物质，除非特别指明。

®，*和 TM 为迈图公司注册商标。



TSE3940 and TSE3941 *Flame Retardant Adhesive Sealants*

Product Description

TSE3940 and TSE3941 flame retardant adhesive/sealants are non-flowable, one-component RTVs that cure quickly by reacting with atmospheric moisture forming a soft elastic silicone rubber. These materials incorporate a newly developed crosslinking chemistry and are non-corrosive to metallic substrates. They are particularly well suited for electrical/electronic applications.

These products differ in color and flame retardancy; TSE3940 is gray and UL94 V-0 rated, TSE3941 is white and is UL94 V-1 rated. When cured, they retain their elastomeric properties throughout the operating temperature range of -55C to 200C (-67F to 392F).

Key Performance Properties

- Meets the corrosion resistance requirements of MIL-A-46146A
- Flame retardant UL rated, non halogenated
- High thermal conductivity
- Fast cure @ ambient temperature
- Outstanding adhesion, including most plastics
- Outstanding electrical properties
- Resistant to heat, cold, moisture, UV, ozone and chemicals

PRODUCT BENEFITS

- One component, no mixing or de-airing required
- Soft consistency provides protection against mechanical and thermal shock
- Excellent electrical insulation
- Protects against moisture
- Convenient packaging/dispensing tubes or cartridges.

Typical Properties Data

Uncured Properties	TSE 3940	TSE 3941
Cure System	Alkoxy	Alkoxy
Color	Gray	White
Consistency	Paste	Paste
Tack Free Time, minutes	5	5
Corrosion (Mil-A-4614A)	None	None

Cured Properties		
Specific Gravity	1.49	1.65
Hardness (JIS A)	40	60
Tensile Strength, kgf/cm ² (psi)	30 (426)	30 (426)
Elongation, %	200	100
Useful Temperature Range (Continuous) °C (°F)	-55 to 200 (-67 to 392)	-55 to 200 (-67 to 392)
Flame Retardancy (UL94, 1.6mm)	V-0	V-1
Thermal Conductivity gm*cal/(sec*cm ² C/cm)	0.97 x 10 ⁻³	2.0 x 10 ⁻³
(W/m-K)	(0.41)	(0.83)
Dielectric Strength(75 mils) kV/mm (V/mil)	21 (530)	22 (560)
Dielectric Constant (60 Hz)	4.5	4.0
Dissipation Factor (60 Hz)	0.050	0.040
Volume Resistivity Ω-cm	6 x 10 ¹⁴	4 x 10 ¹⁴

Specifications

Typical product data values should not be used as specifications. Assistance and specifications are available by contacting GE Silicones at 800/255-8886.

Instructions For Use

Surface Preparation

Insure that surfaces to be sealed, coated, or bonded are clean and free of grease, lubricating oils, release agents and dirt. To optimize fast cure and good adhesion, substrates must be thoroughly dry of cleaning solvents before applying the RTV. The RTV should be applied to one surface only. Wipe away excess uncured material with a clean cloth. After curing, removal of material is more difficult.

Bonding

These products offer primerless adhesion to many substrates including most plastics. Maximum adhesion is obtained 72 hours after full cure is obtained (2 mm thick specimen to an aluminum substrate).

Curing

These products cure at room temperature reacting with atmospheric moisture. Whenever possible, 25°C (77°F) and 50% relative humidity should be provided. Higher temperature

and humidity will cause faster cures while lower temperatures and lower humidity will slow the cure considerably.

These products cure from the outside (outer skin) inward, therefore, cure rate is also dependent on thickness of the material. It is not recommended to apply material thicker than 8mm (5/16”).

Handling and Safety

These products are manufactured and sold for industrial use only. Material Safety Data Sheets are available upon request from GE Silicones. Similar information for solvents and other chemicals used with our products should be obtained from your suppliers.

Storage & Warranty Period

The warranty period is 6 months from the date of shipment from GE Silicones if stored in the original unopened container at temperatures between 5C and 30C (41F and 86F).

Availability

GE Silicones rubber sealants may be ordered from GE Silicones, Waterford, NY 12188, the GE Silicones Sales office nearest you or an authorized GE silicone product distributor.

Government Requirement

Prior to considering use of a GE Silicones' product in fulfilling any Government requirement, please contact the Government and Trade Compliance office at 413-448-4624.

LEGAL DISCLAIMER

THE MATERIALS, PRODUCTS AND SERVICES OF GE SILICONES, GE BAYER SILICONES, GE TOSHIBA SILICONES, THEIR SUBSIDIARIES OR AFFILIATES (THE "SUPPLIER"), ARE SOLD SUBJECT TO THE SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN APPLICABLE SALES AGREEMENTS, PRINTED ON THE BACK OF ACKNOWLEDGMENTS AND INVOICES, OR AVAILABLE UPON REQUEST. ALTHOUGH THE INFORMATION, RECOMMENDATIONS OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (I) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (II) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SUPPLIER'S MATERIALS, PRODUCTS, SERVICES, RECOMMENDATIONS OR ADVICE. NOTHING IN THIS OR ANY OTHER DOCUMENT SHALL ALTER, VARY, SUPERSEDE OR OPERATE AS A WAIVER OF ANY OF THE SUPPLIER'S STANDARD CONDITIONS OF SALE.

Each user bears the full responsibility for making its own determination as to the suitability of Supplier's materials, products, services, recommendations or advice for its own particular purpose. Each user must identify and perform tests and analyses sufficient to assure it that its finished parts will be safe and suitable for use under end-use conditions. Because actual use of products by the user is beyond the control of Supplier, such use is within the exclusive responsibility of the user, and Supplier cannot be held responsible for any loss incurred through incorrect or faulty use of the products. Further, no statement contained herein concerning a possible or suggested use of any material, product, service or design is intended or should be construed to grant any license under any patent or other

intellectual property right of Supplier or any of its subsidiaries or affiliated companies, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.



MATERIAL SAFETY DATA SHEET

TSE3941-W

Version Date: 2008-01-01

Version No: 1.0

MSDS No: 000000037850

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

1.1 Chemical Name: TSE3941-W

1.2 Chemical/Family use: Silicone Compound

1.3 Manufactured by: Momentive Performance Materials (Nantong) Co., Ltd.

Address: No. 9 Jianghai Road, Nantong Economic & Technological Development Area, JiangSu Province, 226009, China

Phone Number: 86-513-81008666

Emergency Phone Number: 86-21-62679090
(Shanghai Center of Toxic Chemicals Information & Consultation)

Fax: 86-513-81008508

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Substance or Mixture: Mixture

2.2 Chemical Name	CAS No.	% (w/w)
Hazardous Ingredients*:		
Silica (or Silicon dioxide)	14808-60-7	40-50%
Titanium oxide	13463-67-7	1-10%
Dialkyl tin compound	77-58-7	0.1-1%

3. HAZARDS IDENTIFICATION

3.1 Hazard Identification: China:
Not classified as a Dangerous Good, according to the Classification and labels of dangerous chemical substances commonly used (GB 13690-92).

Japan:
For 3 tons or more, the material is regarded as a flammable solid family which belongs to the Japanese Fire Service Act Law designated flammable substances.

3.2 Route of Exposure: None known



MATERIAL SAFETY DATA SHEET

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3.3 Possible Health Effects:

- Eyes:** Causes eye irritation and pains.
Skin: May cause skin irritation.
Inhalation: Cause mild respiratory tract irritation.
Ingestion: Little harmful to health if swallowed.

3.4 Environmental Hazards: None known

3.5 Flammability and Explosion Hazard: None known

3.6 Others: This material contains Methylpolysiloxanes which can generate Formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen.
Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard.

4. FIRST AID MEASURES

- 4.1 Eyes:** Immediately wash out with running water for at least 15 minutes. Seek medical treatment.
4.2 Skin: Immediately wash out with soap and running water. Seek medical treatment, depending on the symptoms.
4.3 Inhalation: Rest in fresh air and seek medical treatment, depending on the symptoms.
4.4 Ingestion: Induce vomiting immediately. Get medical attention.
4.5 Note to physicians: None known

5. FIRE FIGHTING MEASURES

- 5.1 Characteristics of hazard:** None Known
5.2 Suitable Extinguishing Media: Foam, powder, carbon dioxide
5.3 Special Fire Fighting Procedures and Equipment:
Remove sources of combustibles. Extinguish the fire using fire-fighting media listed. Cool surrounding tanks, buildings and so on by spraying with water to prevent the



MATERIAL SAFETY DATA SHEET

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fire extension.

The fire fighting should be done from the windward side, with suitable respiratory protective device, if necessary.

5.4 Unsuitable Extinguishing Media: None Known

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Evacuate people on the leeward. Keep people away from the area. Remove sources of ignition. Wear proper protective equipment when in work. Work from the windward side.

6.2 Environmental Precautions: None Known

6.3 Methods for Cleaning up: Put in an empty container for recovery after preventing spill by sand or sandbags, if the amount of spill is large. Put in an empty container for recovery after wiping or soaking up in an inert material, if the amount of spill is small.

7. HANDLING AND STORAGE

7.1 Handling Precautions: Wear eye and hand protection, and if necessary, respiratory protection when in handling. Avoid any source of ignition due to flammability. Ground equipment due expected sensitivity to static discharge. Use immediately after seal is opened. Be careful that moisture vapor don't mix in this product, because this is cured by hydrolysis with moisture in air. This product release alcohol during curing. Use in a well-ventilated area to avoid breathing vapor.

7.2 Storage Conditions: Store in a dark, cool place indoors, with container tightly closed.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Exposure Limit:



MATERIAL SAFETY DATA SHEET

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China OEL

Chemical Name	CAS No.	TWA (mg/m3)	STEL (mg/m3)
Silica dust	14808-60-7		
Total dust			
Containing 10%~50% free SiO ₂		1	2
Containing 50%~80% free SiO ₂		0.7	1.5
Containing >80% free SiO ₂		0.5	1.0
Respirable dust			
Containing >80% free SiO ₂		0.2	0.3
Titanium oxide dust total	13463-67-7	8	10
Dibutyltin dilaurate(skin)	77-58-7	0.1	0.2

8.2 Monitoring method:

8.3 Engineering Controls: Well-ventilated area; Eyewash stations

8.4 Personal Protective Equipment for Routine Handling

Respiratory protection:	Gas mask for organic gas
Eye protection:	Safety glasses
Hand protection:	Rubber or plastics gloves
Skin protection:	Rubber boots and protection

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical Form:	Pasty
9.2 Color:	White
9.3 Odor:	Unique smell
9.4 pH:	Not applied
9.5 Solubility:	Insoluble in water
9.6 Vapor Density (air=1):	Not applied
9.7 Flash Point:	>90°C
9.8 Auto ignition temperature:	No data
9.9 Volatility:	None
9.10 Melting Point:	Not applied
9.11 Specific Gravity:	1.70(23°C)



MATERIAL SAFETY DATA SHEET

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- 9.12 Boiling Point:** Not applied
- 9.13 Vapor Pressure @ 25°C:** Not applied
- 9.14 Oxidizing properties:** Non-oxidative
- 9.15 Octanol/water partition coefficient:** No data available
- 9.16 Viscosity:** No data available
- 9.17 Molecular Weight:** Mixture
- 9.18 Lower Flammability Limit:** Not applied
- Upper Flammability Limit:** Not applied
- 9.19 Upper limit of explosion % (V/V):** Not applied
- Lower limit of explosion % (V/V):** Not applied

10. STABILITY AND REACTIVITY

- 10.1 Stability:** Stable under recommended storage conditions.
- 10.2 Reactivity:** The catalysis of strong acids or bases causes polymerization or decomposition.
- Conditions to Avoid:** None Known
- Materials to Avoid:** Strong acids or bases
- Hazardous Decomposition Products:**
- Reacts with water liberating small amounts of methanol.
May generate formaldehyde at temperatures greater than 150 C (300F).
- Polymerization:** The catalysis of strong acids or bases causes polymerization or decomposition.

11. TOXICOLOGICAL INFORMATION

- 11.1 Acute Toxicity:** No data
- 11.2 Subacute and Chronic Toxicity:** No data
- 11.3 Stimulus Property:** No data
- 11.4 Sensitizing Effects:** No data
- 11.5 Mutagenic Effects:** No data
- 11.6 Teratogenic Effects:** No data
- 11.7 Carcinogenic Effects:** No data



MATERIAL SAFETY DATA SHEET

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11.8 Reproductive Effects: No data

11.9 Other Information: No data

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity: No data

12.2 Bio-Degradation: No data

12.3 Non-Bio-Degradation: No data

12.4 Bio-Accumulation: No data

12.5 Other Harmful Effects: No data

13. DISPOSAL CONSIDERATIONS

13.1 Waste property: Industrial waste

13.2 Product Disposal: Incineration should be made in approved chemical incinerator in accordance with regulations. Silica particulates are formed on incineration.

13.3 Packaging Disposal: No data

13.4 Precautions: No data

14. TRANSPORT INFORMATION

14.1 Road and Rail Transport:

UN NO: Not applied

Packing Group: Not applied

14.2 Sea Transport (IMDG):

UN NO: Not applied

Packing Group: Not applied

Proper Shipping Name: Not applied

Technical Name: Not applied

14.3 Air Transport (IATA):

UN NO: Not applied

Packing Group: Not applied

Proper Shipping Name: Not applied

Technical Name: Not applied



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14.4 International regulation: The substance is not regarded as a dangerous material for ship and air transportation.

15. REGULATORY INFORMATION

15.1 Applicable Laws: GB 16483-2000: General rules for preparation of chemical safety data sheet (CSDS)
GB 12268-2005: List of Dangerous Goods
GB 13690-92: Classification and labels of dangerous chemical substances commonly used
GB/T 15098-94: The Principle of Classification of Transport Package Groups of dangerous goods

15.2 Chemical Inventories: All ingredients contained in products have been listed on IECSC

16. OTHER INFORMATION

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Product Data

Preliminary Flame Retardant Adhesive Sealant

TSE3941-W

LI-82-07729 Issued Oct. '07
Global Electronic Materials Technology Center
Momentive Performance Materials (Nantong) Co., Ltd.

PRODUCT DESCRIPTION

TSE3941-W is one-component, non-corrosive, low volatile silicone adhesive sealant that cures on exposure to atmospheric moisture to form an elastic and flame retardant silicone rubber.

KEY FEATURES

- ◆ Fast Tack-free time
- ◆ Flame retardant:UL94V-0 recognized (File No: E56745)
- ◆ Low volatility
- ◆ Excellent adhesion to many substrates
- ◆ Non-corrosive to metals
- ◆ Low odor cure; releases an alcohol vapor during cure

APPLICATIONS

- ◆ Flame retardant adhesive for high voltage parts
- ◆ Sealing of electrical and industrial applications required flame retardancy
- ◆ Connection sealing on electronic parts assemblies
- ◆ Waterproof sealant for electrical, electronic and communication equipment

TYPICAL PROPERTY DATA

(JIS K 6249)

TYPICAL UNCURED PROPERTIES		
Appearance		Non-flowable paste, White
Tack-free Time (23°C)	min.	5
TYPICAL CURED PROPERTIES (7days @23°C / 50% RH)		
Appearance		White rubber
Density	Mg/m ³	1.70
Hardness (Type A)		63
Tensile strength	MPa {kgf/cm ² }	2.9 {30}
Elongation	%	100
Adhesion lap share strength* ¹	MPa {kgf/cm ² }	1.5{15}
Low molecular siloxane (D3-D10)	wt%	0.01
Flammability Classification* ² (Thickness, 2.0mm)		UL94 V-0
Thermal Conductivity* ²	W/(m·K) {cal/cm·s·°C}	0.7{1.7×10 ⁻³ }
ELECTRICAL PROPERTIES (CURED)		
Volume resistivity	MΩ·m {Ω·cm}	4×10 ⁶ {4×10 ¹⁴ }
Dielectric strength	kV/mm	22
Dielectric constant (60Hz)		4.0
Dielectric loss (60Hz)		0.04

*¹Aluminum, *²In-house testing

Product Data

Preliminary
**Flame Retardant
 Adhesive Sealant**

TSE3941-W

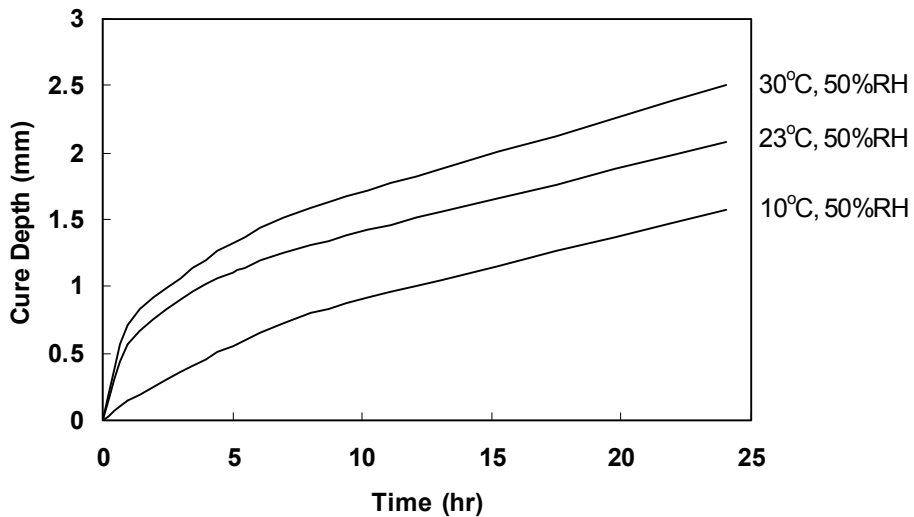
LI-82-07729 Issued Oct. '07
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ADHESION PERFORMANCE

SUBSTRATE	NON PRIMER
Aluminum	○
Copper	○
Phenolic resin	○
Epoxy resin	○
Unsaturated polyester resin	○
ABS resin	○
Polyamide	○
Polycarbonate	○
Polyphenylene ether	○
Polyethylene	×
Polytetrafluoroethylene	×
Glass	○

○: Excellent (Cohesive failure) ×: Poor (Adhesive failure)

CURING PROPERTIES



These property data values should not be used as specifications. Assistance and specifications are available by contacting Momentive Performance Materials Commercial Office

Product Data

Preliminary
**Flame Retardant
Adhesive Sealant**

TSE3941-W

*LI-82-07729 Issued Oct. '07
Global Electronic Materials Technology Center
Momentive Performance Materials (Nantong) Co., Ltd. .*

HANDLING AND SAFETY

- ◆ Wear eye protection and protective gloves at all times when working with this product.
- ◆ Maintain adequate ventilation in the work place at all times.

STORAGE

- ◆ Store in a cool, dry place out of direct sunlight.
- ◆ Keep out of the reach of children.

Product Data

Preliminary
**Flame Retardant
Adhesive Sealant**

TSE3941-W

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Preliminary Data Sheet Disclaimer

The product described in this preliminary data sheet is not a standard commercial product. Momentive Performance Materials does not have an adequate statistical basis for establishing manufacturing standards and process control parameters. As a result, this product may not become a standard commercial product and the product properties and application information appearing in this preliminary data sheet may not accurately reflect product properties and application information for a product which may become generally as a standard commercial product.

FOR INDUSTRIAL USE ONLY

It is the responsibility of the user to determine the suitability of any Momentive Performance Materials Nantong product for any intended application. NEVER USE ANY MOMENTIVE PERFORMANCE MATERIALS JNantong PRODUCT FOR IMPLANTATION OR INJECTION INTO THE HUMAN BODY. Specifications are available by contacting Momentive Performance Materials Nantong. Typical property data values should not be used as specifications. Inasmuch as Momentive Performance Materials JNantong Co.,Ltd has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the suitability of the material for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any Momentive Performance Materials Nantong patent covering use or as recommendations for use of such materials in the infringement of any patent. Material Safety Data Sheets are available upon request from Momentive Performance Materials Nantong. The contents of this catalog are subject to change without notice. No part of this data may be reproduced without the prior approval of Momentive Performance Materials Nantong.



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