

Part 1 Chemicals and Corporate Identification

第 1 部分 化学品与企业标识

Product Name: SMT-999B Photovoltaic Module Junction Box Potting Compound

Application: Potting for junction boxes

Company Name: Anhui Surmount New Materials Co., Ltd.

Address: No. 60, Weier Rd, Laian County Industrial Park, Chuzhou, Anhui

Tel: 0550-5686696

产品名称: SMT-999 光伏组件接线盒灌封胶 B

产品用途: 接线盒灌封

企业名称: 安徽斯迈特新材料股份有限公司

地址: 安徽省滁州市来安县工业园 c 区纬二路

电话: 0550-5686696

Part 2 Hazards Identification

第 2 部分 危险性概述

GHS Hazard Classification:

Skin corrosion/irritation: Category 2 (H315)

Skin sensitizer: Category 1 (H317)

Serious eye damage/eye irritation: Category 2 (H319)

Pictogram:



Signal Word: Warning

Hazard Statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

Precautionary Statements:

Precautionary statements-Prevention:

P264: Wash face, hands and any exposed skin thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements-Response:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

Storage: P402+P404: Store in a dry place. Store in a closed container.

Disposal: P501: Dispose of contents/container in accordance with local /regional /national /international regulations.

GHS 危险性类别:

皮肤腐蚀/刺激: 类别 2 (H315)

皮肤致敏物: 类别 1 (H317)

严重眼损伤/眼刺激: 类别 2 (H319)

象形图:



警告词: 警告

危害说明:

H315: 造成皮肤刺激。

H317: 可能造成皮肤过敏反应

H319: 造成严重眼刺激

防范说明:

预防措施: P264: 作业后彻底清洗脸部、手和任何暴露的皮肤。

P272: 受污染的工作服不得带出工作场地。

P280: 戴防护手套/ 穿防护服/ 戴防护眼罩/ 戴防护面具。

事故响应: P302+P352: 如皮肤沾染: 用肥皂和水充分清洗。

P333+P313: 如发生皮肤刺激或皮疹: 求医/就诊。

P362+P364: 脱掉沾染的衣服, 清洗后方可重新使用。

P305+P351+P338: 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。

P337+P313: 如仍觉眼刺激: 求医/就诊。

安全储存: P402+P404 存放在干燥处。密闭容器储存。

废弃处置: P501: 按照地方/区域/国家/国际规章处置内装物/容器。

Part 3 Composition/information on ingredients

第 3 部分 成分 / 组成信息

Form of product: Mixture

Information on main ingredients:

产品形式：混合物

主要成分信息：

Serial No	Chemical Name	CAS No	Content %
1	Poly (dimethylsiloxane)	63148-62-9	20-50
2	Tetraethyl Orthosilicate	78-10-4	10-40
3	Poly(methyltriethoxysilane) oligomer	NA	10-40
4	alkyl-functional silane	NA	1-20
5	Dibutyltin Dilaurate	77-58-7	0.01-1

序号	化学名称	CAS号	含量%
1	聚二甲基硅氧烷	63148-62-9	20-50
2	正硅酸乙脂	78-10-4	10-40
3	聚甲基三乙氧基硅烷低聚物	NA	10-40
4	双氨基烷基硅烷共低聚物	NA	1-20
5	二月桂酸二丁基锡	77-58-7	0.01-1

Part 4 First Aid Measures

第 4 部分 急救措施

4.1 Description of First Aid Measures

General Advice: First aid measures are generally required. Show this SDS to the attending physician.

Skin Contact: Rinse with clean water. Ensure knowledge of relevant personal protection guidelines and take appropriate precautions to protect yourself.

Eye Contact: Rinse with running water or normal saline. Seek medical attention if necessary.

Inhalation: Move the person to fresh air, keep the airway unobstructed. If symptoms occur, seek medical attention.

Ingestion: Rinse the mouth. Induce vomiting and seek medical attention immediately.

Protection of First Aiders: Ensure that medical personnel are aware of the product's hazardous properties and take appropriate personal protective measures to protect themselves and prevent the spread of contamination.

4.2 Notes for Immediate Medical Care and Special Treatment

(1) Treat symptomatically based on the presenting symptoms.

(2) Note that symptoms may be delayed.

4.1 急救措施描述

一般性建议：急救措施通常是需要的，请将本 SDS 出示给到达现场的医生。

皮肤接触：用清水冲洗即可，确保了解相关的个体防护知识，注意自身防护。

眼睛接触：用流动水或生理盐水清洗，必要时就医。

吸入：移至空气新鲜处，保持呼吸道畅通，如有不适，请就医。

摄入：清理口腔，催吐，就医。

急救人员的防护：确保医护人员了解产品的危害特性，并采取自身防护措施，以保护自己和防止污染传播。

4.2 紧急医疗处理和特殊处理的说明

(1) 根据出现的症状进行针对性处理。

(2) 注意症状可能会出现延迟。

Part 5 Fire-fighting Measures

第 5 部分 消防措施

Suitable extinguishing media: Water mist, foam, carbon dioxide (CO₂), dry chemical powder.

Unsuitable extinguishing media: Do not use a direct water jet, as this may spread the fire.

Special hazards arising from the substance: During a fire, harmful gases (including carbon oxides) may be generated.

Advice for firefighters and protective measures: In case of fire, wear self-contained breathing apparatus (SCBA). Firefighters must wear appropriate respiratory protection and protective clothing, and follow the fire safety instructions at the workplace.

合适的灭火剂：水雾，泡沫，二氧化碳，干粉。

不合适的灭火剂：不能用喷水注来灭火，否则会使火势蔓延。

特别危险性：发生火灾时，可能会产生对人体有害的气体。

灭火注意措施及防护措施：发生火灾时需佩戴自给式呼吸器。消防人员佩戴合适的呼吸器并穿防护服，遵照工作场所的防火指示。

Part 6 Accidental Release Measures

第 6 部分 泄露应急处理

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid breathing vapors. Avoid contact with skin and eyes. Establish a warning zone based on the area affected by liquid flow and vapor diffusion; evacuate non-essential personnel to a safe area from the crosswind or upwind direction. Emergency responders are recommended to wear respiratory protection or dust masks and protective clothing.

6.2 Environmental precautions

Prevent leakage from entering sewers, drainage systems or soil.

6.3 Methods and materials for containment and cleaning up

Eliminate all ignition sources. If possible, stop the leak at the source promptly. Cover and absorb the spill with a suitable inert absorbent material, and collect the spilled material into clean containers as far as possible for subsequent disposal.

6.4 Preventive measures for secondary hazards

No relevant information.

6.5 Other information

Refer to Section 7 (Handling and storage) for information on handling and storage;

Refer to Section 8 (Exposure controls and personal protection) for information on exposure controls and personal protection;

Refer to Section 13 (Disposal considerations) for information on waste disposal.

6.1 作业人员防护措施、防护装备和应急处置程序:

保证足够的通风措施。避免吸入蒸气,避免接触皮肤和眼睛。根据液体流动和蒸汽扩散的影响区域划定警戒区,无关人员从侧风或上风向撤离至安全区。建议应急处理人员戴呼吸器或防尘口罩,穿防护服。

6.2 环境保护措施:

防止泄漏物进入下水道、排水系统或土壤。

6.3 泄露化学品的收容、清除方法及所使用的处置材料:

消除所有点火源。如果可以,及时切断泄露源。可使用适合的惰性吸收材料覆盖和吸收泄漏物,尽可能的将泄漏物收集于清洁的容器中再进行处置。

6.4 防止发生次生危害的预防措施:

无相关信息。

6.5 其他信息:

可参考第 7 部分的操作处置与储存信息;

可参考第 8 部分的接触控制和个体防护信息;

可参考第 13 部分的废弃处置信息。

Part 7 Handling and Storage

第 7 部分 操作处置与储存

7.1 Handling Precautions

Operators shall receive professional training and strictly follow operating procedures, and conduct operations in well-ventilated areas. Avoid inhaling gas, fume, vapor and spray, and prevent contact with skin and eyes. Remove contaminated clothing, and wash it thoroughly before reuse. It is recommended that operators wear respirators, chemical safety goggles, protective clothing and protective gloves.

7.2 Storage Precautions

Store in dry, cool and well-ventilated warehouse. Keep containers tightly closed and store under lock and key.

7.1 操作注意事项:

操作人员必须经过专门培训, 严格遵守操作程序, 在通风良好的情况下操作。避免吸入气体、烟雾、蒸汽、喷雾, 同时避免接触皮肤和眼睛。脱去受污染的衣服, 沾染的衣服清洗后方可重新使用。建议操作人员佩戴呼吸器, 戴化学安全防护镜, 穿戴防护服或防护手套。

7.2 存储注意事项:

存储于干燥、阴凉、通风的库房。保持容器密闭。上锁保管。

Part 8 Exposure Controls/Personal Protection

第 8 部分 接触控制与个体防护

8.1 Engineering Controls

Ensure sufficient ventilation in the workplace to reduce inhalation of harmful gases. Provide safety showers and eye wash stations.

8.2 Personal Protective Equipment

(1) Respiratory protection: Use suitable gas-filtering respiratory protective equipment in poorly ventilated areas.

(2) Eye protection: Wear safety goggles.

(3) Skin and body protection: Wear impermeable protective gloves and lab coats.

(4) Hand protection: Wear impermeable protective gloves, rubber gloves are recommended.

Replace gloves regularly as liquid may cause penetration.

8.3 Environmental Exposure Controls

Consult relevant responsible persons prior to large-scale discharge into the environment.

8.1 工程控制方法:

工作场所保证充足的通风以便减少有害气体的吸入, 提供安全的淋浴和洗眼设备。

8.2 个体防护设备:

- (1) 呼吸系统防护: 如通风不良, 使用合适的带气体过滤器的呼吸防护设备。
- (2) 眼睛防护: 戴安全护目镜。
- (3) 皮肤和身体防护: 穿戴不可渗透材质的防护手套及实验服。
- (4) 手防护: 可穿戴不可渗透材质的防护手套, 推荐使用橡胶手套。注意液体可能会发生渗透, 建议经常更换手套。

8.3 环境暴露控制:

大量排放到环境中之前, 需征询相关负责人的意见。

Part 9 Physical and Chemical Properties

第 9 部分 理化特性

Appearance and state	Liquid
Odor	Slight odor
pH value	No data
Density	0.97g/cm ³
Flash point	>100°C
Solubility	No data
Boiling point, initial boiling point and boiling range	No data
Vapor pressure	No data
Upper/lower explosion limit	No data
Flammability	Non-flammable
Autoignition temperature	Not applicable
Decomposition temperature	No data
Viscosity	No data
Others	No data

外观与性状	液体
气味	稍有气味
PH 值	无相关信息
密度	0.97g/cm ³
闪点	>100°C
溶解性	无相关信息

沸点、初沸点和沸程	无相关信息
蒸气压	无相关信息
爆炸上限/下限	无相关信息
易燃性	不适用
自燃温度	无相关信息
分解温度	无相关信息
粘度	无相关信息
其他	无相关信息

Part 10 Stability and Reactivity

第 10 部分 稳定性与反应活性

Stability	Stable under normal operation and storage conditions.
Hazardous reactions	Stable under normal operating conditions, no hazardous reactions will occur.
Conditions to avoid	Sparks, open flames, high temperature, heating and other incompatible substances.
Incompatible materials	Strong oxidants, strong acids and strong alkalis.
Hazardous decomposition products	No hazardous decomposition products are generated under normal storage and use conditions.

稳定性	正常操作和储存条件下稳定
危险反应	正常操作条件下稳定，不会发生危险的反应
应避免的条件	火花、明火、高温、加热等，以及其他不相容的物质
禁配物	强氧化剂、强酸、强碱
危险分解产物	在正常的储存和使用条件下，不会产生危险的分解产物

Part 11 Toxicological Information

第 11 部分 毒理学信息

(1) Acute toxicity: No relevant information
(2) Skin corrosion / irritation: Skin corrosion: May cause skin sensitization.
(3) Serious eye damage / eye irritation:

Causes eye irritation.

(4) Respiratory or skin sensitization:

Respiratory sensitization: Not classified for this hazard class.

Skin sensitization: May cause skin allergy.

(5) Germ cell mutagenicity, carcinogenicity and reproductive toxicity:

Germ cell mutagenicity: Not classified for this hazard class.

Carcinogenicity: Not classified for this hazard class.

Reproductive toxicity: Not classified for this hazard class.

(6) Specific target organ toxicity - single exposure:

Not classified for this hazard class.

(7) Specific target organ toxicity - repeated exposure:

Not classified for this hazard class.

(8) Aspiration hazard: No relevant information

(1) 急性毒性: 无相关信息

(2) 皮肤腐蚀/刺激性:

皮肤腐蚀性: 可能引起皮肤过敏。

(3) 眼睛损伤/刺激性:

眼睛损伤/刺激性: 对眼睛有刺激

(4) 呼吸或皮肤过敏:

呼吸过敏性: 未分为此危险类别。

皮肤过敏性: 可能引起皮肤过敏性。

(5) 生殖细胞突变性、致瘤性、生殖毒性:

生殖细胞突变性: 未分为此危害类别

致癌性: 未分为此危害类别;

生殖毒性: 未分为此危害类别;

(6) 特异性靶器官系统毒性——一次接触:

未分为此危险类别。

(7) 特异性靶器官系统毒性——反复接触:

未分为此危险类别。

(8) 吸入危害:

无相关信息。

Part 12 Ecological Information

第 12 部分 生态学信息

- (1) Ecotoxicity: No relevant data.
- (2) Persistence and degradability: No relevant data.
- (3) Bioaccumulative potential: No relevant data.
- (4) Mobility in soil: No relevant data.
- (5) Other adverse effects: This product is not classified as environmentally hazardous. However, environmental hazards may occur in case of large-volume or frequent discharge.

- (1) 生态毒性: 无相关信息。
- (2) 持久性和降解性: 无相关信息。
- (3) 潜在生物累积性: 无相关信息。
- (4) 土壤中的迁移性: 无相关信息。
- (5) 其他不良反应: 本产品未分类为对环境有危害。但是不排除其在大量或经常排放本产品的情况下, 可能会对环境产生危害。

Part 13 Disposal Considerations

第 13 部分 废弃处置

(1) Disposal methods

Product: Dispose in accordance with national and local regulations. Refer to relevant information in Section 7 and Section 15. Incineration under supervision is recommended.

Contaminated packaging: Residual product may remain inside, so empty packaging shall be handled in accordance with instructions on safety labels.

(2) Disposal precautions

Dispose as hazardous waste. Consult applicable national and local regulations before disposal. Avoid environmental pollution, and prevent discharge into sewers and soil during disposal.

(1) 废弃处置方法:

产品: 按照国家和地方法规处置。参见第 7 部分和第 15 部分相关信息。建议可在监督下进行焚烧处置。

受污染的包装: 由于包装中可能会残留少量产品, 因此仍然要按照安全警示标签上的内容处理空包装。

(2) 废弃注意事项:

按危险废物处置。处置前应参阅国家和地方有关法规。处置过程中应避免污染环境, 避免排放到下水道或土壤中。

Part 14 Transport Information

第 14 部分 运输信息

- (1) Land transport: No restrictions for road and railway transportation
- (2) Sea transport: Not subject to IMDG Code
- (3) Air transport: Not subject to IATA regulations
- (4) Other information

Transport precautions: Transport vehicles shall be equipped with corresponding types and quantities of fire-fighting appliances and spill emergency treatment equipment. Ensure containers are free from leakage, collapse, falling and damage during transit. Never transport together with oxidants and edible chemicals. Protect against direct sunlight, rain and high temperature during transportation. Keep away from fire sources and heat sources during stops.

- (1) 陆运：公路与铁路运输不受限制
- (2) 海运：不属 IMDG 编码
- (3) 空运：不属 IATA 规定
- (4) 其他信息：

运输注意事项：运输时运输车辆应配备相应品种和数量的消防器材及泄漏应急处理设备。运输过程中要确保容器不泄漏、不倒塌、不坠落、不损坏。严禁与氧化剂、食用化学品等混装混运。运输途中应防曝晒、雨淋、防高温。中途停留时应远离火种、热源。

Part 15 Regulatory Information

第 15 部分 法规信息

Regulatory Information of China:

Product Component Listing Information in the Following Inventory:

IECSC: All components of this product are either listed in the inventory, have completed registration or filing, or are exempted.

- 1.The following laws, regulations and standards stipulate the safe use, storage, transportation, handling, classification and labeling of chemicals: Safety Specifications for Classification, Precautionary Labels and Precautionary Statements of Chemicals (GB 20576-2006 ~ GB 20602-2006).
- 2.General Rules for Classification and Hazard Communication of Chemicals (GB 13690-2009).
- 3.Work Safety Law of the People's Republic of China (Adopted at the 28th Meeting of the

Standing Committee of the Ninth National People's Congress on June 29, 2002)中国人大网.

4.Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases (Adopted at the 24th Meeting of the Standing Committee of the Ninth National People's Congress on October 27, 2001).

5.Environmental Protection Law of the People's Republic of China (Adopted at the 11th Meeting of the Standing Committee of the Seventh National People's Congress on December 26, 1989).

6.Regulations on the Safety Management of Hazardous Chemicals (Adopted at the 144th Executive Meeting of the State Council on February 16, 2011).

7.Regulations on Work Safety Licenses (Adopted at the 34th Executive Meeting of the State Council on January 7, 2004).

中国法规信息:

产品成分在下面名录中的列表信息:

IECSC :: 该产品所有组分均已列入名录, 或完成注册或备案, 或被豁免。

1.下列法律法规和标准, 对化学品的安全使用、储存、运输、装卸、分类和标志等方面均作了相应规定:化学品分类、警示标签和警示性说明安全规范 (GB 20576-2006 ~ GB 20602-2006);

2.化学品分类和危险性公示_通则 (GB 13690-2009) ;

3.《中华人民共和国安全生产法》(2002 年 6 月 29 日第九届全国人大常委会第二十八次会议通过);

4.《中华人民共和国职业病防治法》(2001 年 10 月 27 日第九届全国人大常委会第二十四次会议通过);

5.《中华人民共和国环境保护法》(1989 年 12 月 26 日第七届全国人大常委会第十一次会议通过);

6.《危险化学品安全管理条例》(2011 年 2 月 16 日国务院第 144 次常务会议通过);

7.《安全生产许可证条例》(2004 年 1 月 7 日国务院第 34 次常务会议通过) 。

Part 16 Other Information

第 16 部分 其他信息

1.Compilation Standard

This MSDS is compiled in accordance with Safety Data Sheet for Chemical Products — Content and Sequence of Items (GB/T 16483-2008).

2.Compilation Statement

As the national official GHS classification catalogue for chemicals has not yet been issued, the GHS classification in this MSDS is determined by the enterprise in accordance with the series

standards of GB 20576-2006 ~ GB 20602-2006. Relevant adjustments will be made after the official national catalogue is released.

3.Required Professional Training

Provide sufficient information and guidance for trained personnel.

4.References

ESIS: European Chemical Substances Information System

ECHA: European Chemicals Agency Registered Substances Database

5.Disclaimer

All relevant information stated in this MSDS is true and complete, yet full comprehensiveness and absolute accuracy cannot be fully guaranteed. This document is only intended to provide safety precautions for professionally trained personnel handling this product. Individual users shall independently judge its applicability under specific service conditions. Our company shall not be held liable for any injuries arising from the application of this MSDS under special circumstances..

1 制作:

本 MSDS 按照《化学品安全技术说明书内容和项目顺序》(GB/T16483-2008) 标准

2 编制:

由于目前国家尚未颁布化学品 GHS 分类目录, 本 MSDS 中化学品的 GHS 分类是企业根据化学品分类、警示标签和警示性说明规范系列标准 (GB 20576 - 2006 ~ GB 20602 - 2006) 自行进行的分类, 待国家化学品 GHS 分类目录颁布后再进行相应调整。

3 需要进行的专业培训:

为培训人员提供足够的信息和指导说明。

4 参考文献:

ESIS: 欧洲化学物质信息系统。

ECHA : 已完成注册物质数据库。

5 免责声明:

在本 MSDS 中全面真实地提供了所有相关的资料, 但我们并不能保证其绝对的广泛性和精确性。本 MSDS 只为那些受过适当专业培训并使用该产品的有关人员提供对该产品的安全预防资料。获取该 MSDS 的个人使用者, 在特殊的使用条件下, 必须对本 MSDS 的适用性做出独立的判断。在特殊的使用场合下, 对由于使用本 MSDS 所导致的伤害, 本企业不负任何责任。