

AdheSIL Silicone Rubber Base Material Safety Data Sheet

AdhesSIL Silicone Rubber Base (information is below)

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

- 1.1 **Product Name:** AdheSIL Sililcone Rubber Base
 1.2 **Manufacturer's Product Code:** 12021006A
 1.3 **Chemical Classification:** Liquid Silicone Rubber
 1.4 **Use:** Silicone rubber base
 1.5 **Company Details**
Manufacturer/Supplier: G prints & graphics
Address: Pandit guruji margh, Shahapur Dist: Thane, Maharashtra, INDIA
Telephone Number: 02527 272626
Fax Number: 02527 272626
Emergency Telephone Number: 09422092907
Contact Person: Environment, Health and Safety Leader

2. COMPOSITION / INFORMATION ON INGREDIENTS

- 2.1 **Chemical characterization:** Mixture
 2.2 **Hazardous Ingredients:**

| <u>Chemical Name</u> | <u>CAS No.</u> | <u>% (w/w)</u> | <u>Symbols & Health Risk Phrases</u> |
|----------------------|----------------|----------------|--|
|----------------------|----------------|----------------|--|

No hazardous ingredients.

3. HAZARDS IDENTIFICATION

- 3.1 **Overall Hazard Classification:** Not hazardous.
 3.2 **Hazard Information:** Not hazardous.
 3.3 **Precautionary Information:** Avoid contact with skin and eyes.
 3.4 **Signs and Symptoms of Overexposure:** No significant adverse effects from a single exposure expected from normal use.

4. FIRST AID MEASURES

- 4.1 **Eye:** Immediately flush with water.
 4.2 **Skin:** No first aid should be needed.
 4.3 **Inhalation:** No first aid should be needed.
 4.4 **Ingestion:** Get medical attention.
 4.5 **Comments:** Treat symptomatically.
 4.6 **Note to physicians:** Treat symptomatically. For further information, the medical practitioner should contact G prints & graphics.

5. FIRE FIGHTING MEASURES

- 5.1 **Hazardous Properties:** None.

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| | | |
|------------|--|---|
| 5.2 | Extinguishing Media: | On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO ₂), dry chemical or water spray. Water can be used to cool fire exposed containers. |
| 5.3 | Special Fire Fighting Procedures and Equipment: | 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. |
| 5.4 | Hazardous Combustion Products: | Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Nitrogen oxides. Formaldehyde. |
| 5.5 | Unsuitable Extinguishing Media: | None established. |

6. ACCIDENTAL RELEASE MEASURES

| | | |
|------------|-----------------------------------|--|
| 6.1 | Personal Precautions: | Avoid eye contact. 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. Avoid eye contact. Do not take internally. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking. |
| 7.2 | Storage Conditions: | Use reasonable care and store away from oxidizing materials. |
| 7.3 | Unsuitable Packaging Materials: | None established. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Industrial Hygiene Standards

| <u>Ingredients</u> | <u>CAS No.</u> | <u>Exposure Limits</u> |
|--------------------|----------------|------------------------|
| None known. | | |

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AdhesSIL Silicone Rubber Base (information is below)

8.2 Engineering Controls

Local Ventilation: None should be needed.

General Ventilation: Recommended.

8.3 Personal Protective Equipment for Routine Handling

Respiratory protection: No respiratory protection should be needed.

Suitable Respirator: None should be needed.

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

Hand: No special protection needed.

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

Personal Hygiene: Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

8.4 Personal Protective Equipment for Spills

Respiratory protection: No respiratory protection should be needed.

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 **Physical Form:** Viscous Liquid
- 9.2 **Color:** White
- 9.3 **Odor:** Slight odor
- 9.4 **pH:** Not determined.
- 9.5 **Solubility in Water:** Not determined.
- 9.6 **Boiling Point:** > 100 °C
- 9.7 **Melting Point:** Not determined.
- 9.8 **Flash Point:** > 100 °C (Seta Closed Cup)
- 9.9 **Autoignition Temperature:** Not determined.
- 9.10 **Explosive properties:** No
- 9.11 **Oxidizing properties:** No
- 9.12 **Vapor Pressure @ 25°C:** Not determined.
- 9.13 **Specific Gravity:** 3.11
- 9.14 **Octanol/water partition coefficient:** Not determined.
- 9.15 **Vapour Density (air=1):** Not determined.
- 9.16 **Viscosity:** 80000 cSt
- 9.17 **Upper Flammability Limit:** Not determined.
- 9.18 **Lower Flammability Limit:** Not determined.

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AdhesSIL Silicone Rubber Base (information is below)

10. STABILITY AND REACTIVITY

| | |
|--|---|
| 10.1 Stability: | Stable. |
| 10.2 Reactivity | |
| Conditions to Avoid: | None. |
| Materials to Avoid: | Can react with strong oxidising agents. |
| Hazardous Decomposition Products: | Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Nitrogen oxides. Formaldehyde. |
| Hazardous Polymerization: | Hazardous polymerization will not occur. |

11. TOXICOLOGICAL INFORMATION

| | | | |
|-----------------------------|-------------------------------------|--|---|
| 11.1 Routes of Entry | | | |
| | <input type="checkbox"/> Inhalation | <input checked="" type="checkbox"/> Skin Contact | <input checked="" type="checkbox"/> Ingestion |

11.2 Possible Health Effects

Acute

| | |
|--------------------|---|
| Skin: | No significant irritation expected from a single short-term exposure. |
| Eye: | Direct contact may cause temporary redness and discomfort. |
| Inhalation: | No significant effects expected from a single short-term exposure. |
| Ingestion: | Low ingestion hazard in normal use. |

Chronic

| | |
|--------------------|---|
| Skin: | No known applicable information. |
| Inhalation: | No known applicable information. |
| Ingestion: | Repeated ingestion or swallowing large amounts may injure internally. |

| | |
|--|----------------------------------|
| 11.3 Sensitizing Effects: | None known. |
| 11.4 Mutagenic Effects: | None known. |
| 11.5 Reproductive Effects: | None known. |
| 11.6 Carcinogenic Effects: | None known. |
| 11.7 Other Health Hazard Information: | No known applicable information. |

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 Environmental Fate and Distribution

Siloxanes are removed from water by sedimentation or binding to sewage sludge. In soil, siloxanes are degraded.

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|--------------------------|--|
| 12.2 Ecotoxicity: | No adverse effects on aquatic organisms. |
| Bioaccumulation: | No bioaccumulation potential. |

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AdhesSIL Silicone Rubber Base (information is below)

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

12.4 Additional Environmental Information

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

13. DISPOSAL INFORMATION

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.

15. REGULATORY INFORMATION

15.1 NFPA Hazard Signals

| | | | | | | | |
|--------|---|--------------|---|-------------|---|---------|---|
| Health | 0 | Flammability | 1 | Instability | 0 | Special | - |
|--------|---|--------------|---|-------------|---|---------|---|

15.2 Chemical Inventories

- AICS : All ingredients listed or exempt.
- DSL : All chemical substances in this material are included on or exempted from the DSL.
- IECSC : All ingredients listed or exempt.
- EINECS : All ingredients listed or exempt.
- KECL : All ingredients listed, exempt or notified.
- PICCS : 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.
- MITI : All components are listed on ENCS or its exempt rule.

16. OTHER INFORMATION

Contact Point: Environment, Health and Safety Leader
Prepared by: G prints & graphics.

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AdhesSIL Silicone Rubber Base (information is below)

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.

AdheSIL Silicone Rubber Cross Linker Material Safety Data Sheet

AdhesSIL Silicone Rubber Cross Linker (information is below)

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

| | | |
|------------|-------------------------------------|---|
| 1.1 | Product Name: | AdheSIL Silicone Cross Linker |
| 1.2 | Manufacturer's Product Code: | 12021006B |
| 1.3 | Chemical Classification: | Liquid Silicone Rubber |
| 1.4 | Use: | Silicone rubber Cross Linker |
| 1.5 | Company Details | |
| | Manufacturer/Supplier: | G prints & graphics |
| | Address: | Pandit guruji margh, Shahapur Dist: Thane, Maharashtra, INDIA |
| | Telephone Number: | 02527 272626 |
| | Fax Number: | 02527 272626 |
| | Emergency Telephone Number: | 09422092907 |
| | Contact Person: | Environment, Health and Safety Leader |

2. COMPOSITION / INFORMATION ON INGREDIENTS

| | | |
|------------|-----------------------------------|---------|
| 2.1 | Chemical characterization: | Mixture |
| 2.2 | Hazardous Ingredients: | |

| <u>Chemical Name</u> | <u>CAS No.</u> | <u>% (w/w)</u> | <u>Symbols & Health Risk Phrases</u> |
|----------------------|----------------|----------------|---|
| Ethynyl cyclohexanol | 78-27-3 | <10 | Xn Harmful. Xi Irritant. R21/22 Harmful in contact with skin and if swallowed. R36 Irritating to eyes. |

*Classified as hazardous according to the Hazardous Chemical List as defined in Schedule 1 of Manufacture, Storage and Import of Hazardous Chemical Rule, 1989 and European Commission Directive 1999/45/EC (Article 3 [3]).

3. HAZARDS IDENTIFICATION

| | | |
|------------|--|---|
| 3.1 | Overall Hazard Classification: | Not hazardous. |
| 3.2 | Hazard Information: | Not hazardous. |
| 3.3 | Precautionary Information: | Keep container in a well-ventilated place. Do not keep the container sealed. Keep away from sources of ignition - no smoking. Avoid contact with skin and eyes. |
| 3.4 | Signs and Symptoms of Overexposure: | No significant adverse effects from a single exposure expected from normal use. |

4. FIRST AID MEASURES

| | | |
|------------|--------------------|--|
| 4.1 | Eye: | Immediately flush with water for 15 minutes. |
| 4.2 | Skin: | No first aid should be needed. |
| 4.3 | Inhalation: | No first aid should be needed. |
| 4.4 | Ingestion: | Get medical attention. |
| 4.5 | Comments: | Treat according to person's condition and specifics of exposure. |

AdheSIL Silicone Rubber Cross Linker Material Safety Data Sheet

AdhesSIL Silicone Rubber Cross Linker (information is below)

4.6 Note to physicians: Treat symptomatically. For further information, the medical practitioner should contact G prints & graphics.

5. FIRE-FIGHTING MEASURES

- 5.1 Hazardous Properties:** None.
- 5.2 Extinguishing Media:** On large fires use AFFF alcohol compatible foam or water spray (fog). On small fires use AFFF alcohol compatible foam, CO₂ or water spray (fog). Water can be used to cool fire exposed containers. Most fire extinguishing media will cause hydrogen evolution. When the fire is put out, hydrogen may accumulate in poorly ventilated or confined areas and result in flash fire or explosion if ignited. Foam blankets may also trap hydrogen or flammable vapors, with the possibility of subsurface explosion.
- 5.3 Special Fire Fighting Procedures and Equipment:** 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.
- 5.4 Hazardous Combustion Products:** Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde. Hydrogen.
- 5.5 Unsuitable Extinguishing Media:** Dry powder. Do not allow extinguishing medium to contact container contents.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions:** Avoid eye contact. 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. Materials in contact with water, moisture, acids or bases have the potential to generate hydrogen gas. Recovered material should be stored in a vented 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. Avoid eye contact. Do not take internally. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

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- | | | |
|------------|--|---|
| 7.2 | Storage Conditions: | Product evolves minute quantities of flammable hydrogen gas which can accumulate. Adequately ventilate to maintain vapors well below flammability limits and exposure guidelines. Do not repackage. Do not store in glass containers which may shatter due to pressure build up. Clogged container vents may increase pressure build up. Keep container closed and store away from water or moisture. |
| 7.3 | Unsuitable Packaging Materials: | Do not store in or use glass containers. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Industrial Hygiene Standards

| <u>Ingredients</u> | <u>CAS No.</u> | <u>Exposure Limits</u> |
|----------------------|----------------|--|
| Ethynyl cyclohexanol | 78-27-3 | Observe particulate limits. OSHA PEL: TWA 15 mg/m ³ total dust, 5 mg/m ³ respirable fraction. ACGIH TLV: TWA 10 mg/m ³ inhalable particulate, 3 mg/m ³ respirable particulate. |

8.2 Engineering Controls

Local Ventilation: Recommended.

General Ventilation: Recommended.

8.3 Personal Protective Equipment for Routine Handling

Respiratory protection: No respiratory protection should be needed.

Suitable Respirator: None should be needed.

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

Hand: No special protection needed.

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

Personal Hygiene: Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

8.4 Personal Protective Equipment for Spills

Respiratory protection: No respiratory protection should be needed.

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | | |
|-------------|----------------------------------|-----------------------|
| 9.1 | Physical Form: | Viscous Liquid |
| 9.2 | Color: | Colorless |
| 9.3 | Odor: | Slight odor |
| 9.4 | pH: | Not determined. |
| 9.5 | Solubility in Water: | Not determined. |
| 9.6 | Boiling Point: | > 100 °C |
| 9.7 | Melting Point: | Not determined. |
| 9.8 | Flash Point: | > 100 °C (Closed Cup) |
| 9.9 | Autoignition Temperature: | Not determined. |
| 9.10 | Explosive properties: | No |

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AdhesSIL Silicone Rubber Cross Linker (information is below)

| | | |
|------|---|-----------------|
| 9.11 | Oxidizing properties: | No |
| 9.12 | Vapor Pressure @ 25°C: | Not determined. |
| 9.13 | Specific Gravity: | 1.2 |
| 9.14 | Octanol/water partition coefficient: | Not determined. |
| 9.15 | Vapour Density (air=1): | Not determined. |
| 9.16 | Viscosity: | 2000 cSt |
| 9.17 | Upper Flammability Limit: | Not determined. |
| 9.18 | Lower Flammability Limit: | Not determined. |

10. STABILITY AND REACTIVITY

| | | |
|------|--|---|
| 10.1 | Stability: | Stable under normal usage conditions. Material may decompose (generating heat and gas) if exposed to temperatures in excess of 250 degree C. |
| 10.2 | Reactivity Conditions to Avoid: | None. |
| | Materials to Avoid: | Water, alcohols, acidic or basic materials, and many metals or metallic compounds, when in contact with product, liberate flammable hydrogen gas, which can form explosive mixtures in air. Can react with strong oxidising agents. |
| | Hazardous Decomposition Products: | Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde. Hydrogen. |
| | Hazardous Polymerization: | Hazardous polymerization will not occur. |

11. TOXICOLOGICAL INFORMATION

| | | | | |
|------|------------------------|--|--|---|
| 11.1 | Routes of Entry | [<input checked="" type="checkbox"/>] Inhalation | [<input checked="" type="checkbox"/>] Skin Contact | [<input checked="" type="checkbox"/>] Ingestion |
|------|------------------------|--|--|---|

11.2 Possible Health Effects

Acute

| | |
|--------------------|---|
| Skin: | No significant irritation expected from a single short-term exposure. |
| Eye: | Direct contact may cause mild irritation. |
| Inhalation: | No significant effects expected from a single short-term exposure. |
| Ingestion: | Low ingestion hazard in normal use. |

Chronic

| | |
|--------------------|---|
| Skin: | Repeated or prolonged exposure may cause irritation. |
| Inhalation: | No known applicable information. |
| Ingestion: | Repeated ingestion or swallowing large amounts may injure internally. |

| | | |
|------|------------------------------|-------------|
| 11.3 | Sensitizing Effects: | None known. |
| 11.4 | Mutagenic Effects: | None known. |
| 11.5 | Reproductive Effects: | None known. |
| 11.6 | Carcinogenic Effects: | None known. |

AdheSIL Silicone Rubber Cross Linker Material Safety Data Sheet

AdhesSIL Silicone Rubber Cross Linker (information is below)

| | |
|--------|---|
| AICS | : All ingredients listed or exempt. |
| DSL | : All chemical substances in this material are included on or exempted from the DSL. |
| IECSC | : All ingredients listed or exempt. |
| EINECS | : All ingredients listed or exempt. |
| KECL | : All ingredients listed, exempt or notified. |
| PICCS | : 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. |

16. OTHER INFORMATION

Contact Point: Environment, Health and Safety Leader
Prepared by: G prints & graphics

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.

AdheSIL Silicone Rubber Cross Linker Material Safety Data Sheet

AdhesSIL Silicone Rubber Cross Linker (information is below)

11.7 Other Health Hazard Information: No known applicable information.

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 Environmental Fate and Distribution

Siloxanes are removed from water by sedimentation or binding to sewage sludge. In soil, siloxanes are degraded.

12.2 Ecotoxicity: No adverse effects on aquatic organisms.

Bioaccumulation: No bioaccumulation potential.

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

12.4 Additional Environmental Information

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

13. DISPOSAL INFORMATION

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.

Remarks: VENTED PACKAGES ARE FORBIDDEN FOR AIR TRANSPORT.

15. REGULATORY INFORMATION

15.1 NFPA Hazard Signals
Health 1 Flammability 1 Instability 1 Special -

15.2 Chemical Inventories
ENCS/ISHL : All components are listed on ENCS/ISHL or its exempt rule.