Material Safety Data Sheet

(This MSDS is prepared pursuant to the provision of Article 41 of the Industrial Safety and Health Law.)

1. PRODUCT AND COMPANY IDENTIFICATION

A. Product Name : **SL-SP GLASS BEADS ADHESIVE**

· Product Code : 1808 GLASS BEADS ADHESIVE

B. Recommended use of the chemical and restrictions on use

· Recommended use : Fabric Screen printing inks

· Restrictions on use : no data available

C. Company Details

· Manufacturer/Supplier : Aone Co., Ltd

· Address : 14-4, Woogo-Ri, Kwang Jeok-Myun, Yangju-Si, Kyunggi-Do, Korea

· Telephone Number : +82-31-878-9295/6

· Fax Number : +82-31-878-9207

D. Date Revised : June, 20, 2013

E. MSDS Number : #309

2. HAZARDS IDENTIFICATION

A. Hazard/Risk Classification

· Skin Corrosion/ Irritation : Category 2

· Serious eye damage/ eye irritation : Category 2

B. Label elements including precautionary statements

· Symbol :

· Signal Word : Warning

· Hazard/Risk Statement :

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Precautionary Statement :

P264 Wash ... thoroughly after handling.

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

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

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

P321 Specific treatment (see ... on this label).

P332+P313 If skin irritation occurs : Get medical advice/attention.

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

P362 Take off contaminated clothing and wash before reuse.

C. Other Hazard/Risk which are not included in the classification criteria(e.g. dust explosion hazard) :

· NFPA RATINGS (SCALE 0-4) : HEALTH=1, FIRE=1, REACTIVITY=0

3. COMPOSITON/ INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Wt(%)
dimethyl, methylvinyl siloxane, dimethylvinyl-terminated	68083-18-1	56-60
trimethylated silca	68909-20-6	7-30
dimethyl, methylhydrogen siloxane	68037-59-2	7-10

4 . FIRST AID MEASURES

A. Eyes : Immediately flush eyes with plenty of water for at least 15minutes and call a doctor/physician. Do not rub your eyes.

B. Skin : Flush skin with plenty of water for at least 15minutes while removing contaminated clothing and shoes. Laundering enough contaminated clothing before reuse.

C. Inhalation : When exposed to large amounts of steam and mist, move to fresh air. Take specific treat -ment if needed.

D. Ingestion : About whether I should induce vomiting take the advice of a doctor. Rinse your mouth with water immediately.

5. FIRE FIGHTING MEASURES

A. Flash Point : >100℃ (Seta Closed Cup)

B. Authorization Temperature : Not determined.

C. Lower Flammability Limit : Not determined.

D. Upper Flammability Limit : Not determined.

E. Fire Service Law Classification : To be assessed.

F. Extinguishing Media : On large fires use dry chemical, form 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.

G. Special Fire Fighting Procedures and Equipment :

▶ Self-contained breathing apparatus and protective clothing should beworn in fighting large fire 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.

H. Hazardous Combustion Products

▶ Silicon dioxide. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Nitrogen oxides. Hydrogen.

I. Unsuitable Extinguishing Media : None established.

6. ACCIDENTAL RELEASE MEASURES

A. Personal Precautions

▶ Avoid eye contact. Do not take internally.

B. Environmental Precautions

▶ Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.

C. 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 absorbent.

Clean area as appropriate since some silicone materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent 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

A. Handling Precautions

▶ Use with adequate ventilation. Avoid eye contact, Do not take internally. Exercise good industrial hygiene practice. Wash after handing, especially before eating, drinking or smoking.

B. Storage Conditions

▶ Product may evolve 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Engineering Controls

·Local Ventilation : None should be needed.

·General Ventilation : Recommended.

B. Personal Protective Equipment for Routine Handling

·Respiratory protection : No respiratory protection should be needed.

·Suitable Respirator : None should be needed.

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

·Hand protected : No special protection needed.

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

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

C. 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.

·precautionary Measures : Avoid eye contact. Do not take internally. Use reasonable care.

·Comments : If this product is heated to > 150 degrees C teace quantities of formaldehyde may be released, and adequate ventilation is required.

※ Note

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

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Physical Form : Viscous Liquid

B. Color : Transparency

C. Odor : Slight odor

D. pH : Not determined.

E. Solubility in Water : Not determined.

F. Boiling Point : > 350℃ / 662°F

G. Melting Point : Not determined.

H. Explosive properties : No

I. Oxidizing properties : No

J. Vapor Pressure 25℃ : Not determined.

K. Specific Gravity : 1.1

L. Octanol / Water partition coefficient : Not determined.

M. Vapour Density (air=1) : Not determined.

N. Viscosity : 60 Pa s

O. Molecular Weight : Not determined.

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

10. STABILITY AND REACTIVITY

A. Stability : Stable.

B. Reactivity

·Conditions to avoid : None

·Materials to avoid

▶ Oxidizing material can cause a reaction. 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.

·Hazardous Decomposition Products

▶ Silicon dioxide Carbon oxides and traces of incompletely burned carbon compounds, Formaldehyde, Nitrogen oxides, Hydrogen.

·Hazardous Polymerization : Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

A. Acute Oral Toxicity : Refer to section 3.2.

B. Acute Dermal Toxicity : Refer to section 3.2.

C. Acute Inhalation Toxicity : Refer to section 3.2.

D. Sub - Acute : No known applicable information.

E. Chronic Effects : Refer to section 3.2.

F. Mutagenic Effects : None known.

G. Reproductive Effects : None known.

H. Carcinogenic Effects : None known.

I. Other Health Hazard Information : No known applicable information.

12. ECOLOGICAL INFORMATION

A. Environmental Fate and Distribution.

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

B. Environmental Effects : No adverse effects on aquatic organisms.

▶ Bioaccumulation : No bioaccumulation potential.

C. 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.

D. Additional Environmental Information

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

13. DISPOSAL CONSIDERATIONS

A. Regulatory status under the Waste Management Law

▶ Product should be disposed of in accordance with Waste Management Law Article 12.

B. Product Disposal : Dispose of in accordance with local regulations.

C. Packaging Disposal : Dispose of accordance with local regulations.

14. TRANSPORT INFORMATION

A. Sea transport (IMDG) : Not subject to IMDG code.

B. Transportation Precautions

▶ Transport in accordance with the relevant regulations. Refer to section 7.2 for further information on transportation requirements. Refer to section 6 for the safety measures to be taken in the event of accidental release.

C. Other International Transportation Regulations

·Air Transport (IATA-DGR) : Not subject to IATA-DGR regulations.

15. REGULATORY INFORMATION

A. Classification and labelling in accordance with Industrial Safety and Health Law

·Classification : Not hazardous.

·S-phrases : 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.

B. Toxic Chemicals Control Act and Other Chemicals Management Regulations

·Chemicals controlled in accordance with Toxic Chemicals Control Law : Not applicable.

C. Other International Regulations

·Chemical Inventories

▶ MITI : All components are lighted on RNCS or its exempt rule.
▶ KECL : All ingredients lighted, exempt or notified.
▶ EINECS : Not determined.
▶ TCSA : Not determined.
▶ DSL : Not determined.
▶ AICS : Not determined.
▶ IECSC : Not determined.
▶ PICCS : Not determined.

16. OTHER INFORMATION

- 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 recomme -ndations in the specific context of the intended use and determine whether they are appropriate.