**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

Product Identifier : TRANSPARENT GLUE STICK

<table>
<thead>
<tr>
<th>Color</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>transparent</td>
<td>8 Grams</td>
</tr>
<tr>
<td></td>
<td>10 Grams</td>
</tr>
<tr>
<td></td>
<td>15 Grams</td>
</tr>
<tr>
<td></td>
<td>20 Grams</td>
</tr>
<tr>
<td></td>
<td>25 Grams</td>
</tr>
<tr>
<td></td>
<td>35 Grams</td>
</tr>
<tr>
<td></td>
<td>40 Grams</td>
</tr>
</tbody>
</table>

General Use : Glue

Company Identification : Modern Teaching Aids Pty Ltd
- **Office**: Level 1, 122-126 Old Pittwater Road, Brookvale NSW 2100 Australia
- **Post**: PO BOX 6367 Frenchs Forest NSW 2086 Australia
- **Freephone**: 1800 251 497 (AU) 0800 808 044 (NZ)
- **FreeFax**: 1800 151 492 (AU) 0800 682 329 (NZ)
- **Email**: sales@teaching.com.au sales@teaching.co.nz
- **Website**: www.teaching.com.au www.teaching.co.nz

**** SECTION 2 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

There are no emergency overview specially.
(Any damage cause against skin contact and eye contact, and other contacts aren't reported)

Potential Health Effects
- **Eye**:
  - Cause no eye irritation when scrubed to eyes with polluted hands.

- **Skin**: 
Cause no skin irritation by skin contact.

Ingestion:
See the section 15(ITEM: Acute oral toxicity)
Inhension:
Cause no damage when inhaling it vapor.

**** SECTION 3 - COMPOSITION AND INFORMATION ON INGREDIENTS *****

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>CAS/CI#</th>
<th>PERCENT</th>
<th>Exposure Limit(mg/m3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYVINYLPYRROLIDONE</td>
<td>88-12-0</td>
<td>22.0</td>
<td>Not conformed</td>
</tr>
<tr>
<td>SODIUM STEARATE</td>
<td>882-16-2</td>
<td>8.0</td>
<td>&quot;</td>
</tr>
<tr>
<td>WATER</td>
<td>7732-18-5</td>
<td>62.9</td>
<td>&quot;</td>
</tr>
<tr>
<td>GLYCERINE</td>
<td>56-81-5</td>
<td>5.0</td>
<td>&quot;</td>
</tr>
<tr>
<td>METHYL PARABEN</td>
<td>99-76-3</td>
<td>0.1</td>
<td>&quot;</td>
</tr>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>1310-73-2</td>
<td>1.0</td>
<td>&quot;</td>
</tr>
<tr>
<td>SILICON</td>
<td>7440-21-3</td>
<td>1.0</td>
<td>&quot;</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Flush eyes with plenty of water. Though a little congestion, if you inflict a friction to eyes, take a rest few minutes with shut an eyelid.

Skin:
Cause no any special damage. Wash with water.

Ingestion:
Cause no serious damage by a small quantity. Get medical aid, if you intake a large quantity.

Inhalition:
It is not needed a first aid.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

Extinguishing Media:
In case of fire use water spray, dry chemical, carbon dioxide, or other common extinguish media.(There is few flammability in the original condition of product)

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

NFPA Rating: No data

Explosion Limits, Lower: Not applicable.
Upper: Not applicable.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****
General Information:
Use proper personal protective equipment as indicated section in 8.

Spills/Leaks:
No need a special action.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:
No need a special production line or control technology.

Storage:
Store in a cool, dry place.
Individual container of product: cover a cap after used tightly.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Facilities strong or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protection
Eyes Protection: Not need specially.
Skin Protection: If possible, care about touch to skin by content.
Clothing: Not available.
Respiratory Protection: Not available.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES *****

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid Stick Type.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Transparent</td>
</tr>
<tr>
<td>Odor</td>
<td>Feeble (Organic substance vapor)</td>
</tr>
<tr>
<td>pH</td>
<td>9.5-10.5</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Less than 70 wt-%</td>
</tr>
<tr>
<td>Boiling Point</td>
<td></td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>58°C</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td></td>
</tr>
<tr>
<td>Solubility</td>
<td>soluble in cold and hot water</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>(1.02 - 1.06cm³)/(1.02 - 1.06)</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>Amorphousness</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.

Condition to Avoid:
Not available.

Incompatibilities with other Materials:
Weak oxidizing agents and water.
Hazardous Decomposition Products:
None
Hazards Polymerization: Available.
Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

LD50/LC50:
No information available.

Multagenicity:
No information available.

Teratogenicity & Reproductive Effects:
No information available.

Carcinogenicity:
Not listed by ACGIH, IARC, NIOSH, or OSHA. (In case of colored product's must confine below 0.0254 wt-%: 1 pigment ingredient.)

Ecotoxicity: Not evaluated completely.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity: Not evaluated completely.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with internal regulation for environmental protection.

**** SECTION 14 - TRANSPORT INFORMATION ****

Not established.

**** SECTION 15 - REGULATORY INFORMATION ****

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Regulation</th>
<th>Requirement</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin patch</td>
<td>Certificating rule by Korea Consuming Science Research Center</td>
<td>Almost Negative - Negative</td>
<td>Almost Negative</td>
</tr>
<tr>
<td>Heavy metal's content</td>
<td>EN 71, Part 3.</td>
<td></td>
<td>Not detected or Less than 1.0PPM</td>
</tr>
<tr>
<td>Free formaldehyde content</td>
<td>KS K 0611. B, Acetone method AATCC - 112</td>
<td></td>
<td>Less than 1.0PPM</td>
</tr>
<tr>
<td>Pentachloro Phenol content</td>
<td>IWS R. N. ET - 674(GC)</td>
<td></td>
<td>Not detected</td>
</tr>
<tr>
<td>Allergenic Dystuff</td>
<td>Identification of allergenic dyestuff by TLC method, and reconfirmed by High Pressure Liquid Chromatography-Diode array detector (HPLC - Diode array)</td>
<td>Negative</td>
<td>All-Not verifiable (Test result: Negative)</td>
</tr>
<tr>
<td>Arilamines</td>
<td>Reduction with Sodiumdithionic, after extraction incitrate buffer solution. Identification of carcinogenic arylamines by TLC method, and reconfirmed by gaschromatography-mass spectrometry (Mass selective detector-Hewlet packed 5972)</td>
<td>Textiles, Leathers, etc : Not detected (Test result : Negative)</td>
<td>All-Not detected</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| Antibacterial | Certificating rule by Korea Consuming Science Research Center  
* Method : Shake flask method  
* Used Virus :  
- Escherichia coli ATCC 25922  
- Bacillus megaterium ATCC 10778  
ASTM (G-21 and G-22) | Above 90%-Sterilization | Above 99.0%-Sterilization |  |
| Eye irritation |  |  |  |  |
| Acute oral toxicity | OECD's Guidelines for the testing of chemicals.  
* 401. Acute oral toxicity  
Estimating acute oral toxicity in Rates.  
* Test method : ASTM E 1163(11.05) |  |  |  |
| Micronucleus assay | OECD's Guidelines for the test of chemicals.  
* 474. Genetic toxicology : |  |  |  |
| Reverse mutation assay | Conduct of Micronucleus Test.  
* Guide for ASTM E1263 (11.05)  
* Guide for ASTM E1202 (11.05)  
OECD's Guidelines for the testing of chemicals  
* 471. Genetic toxicology :  
Salmonella typhimurium, Reverse mutation assay. |  |  |  |

**** SECTION 16 - ADDITION INFORMATION ****

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

For user's safety informations in treatment, we will keep up making MSDS to be more available base on test of verification by gradual degrees.

Accordingly, if the man who require to us for get new informations, he will be determinate for his safety from any harmful risk.

Please refer to the MSDS effective date (creation and revision) for distinguish between new or not, recorded above SECTION 1.

Anyone who wants to have any information related MSDS, see SECTION 1 and call me up anytime you like please.