Material Safety Data Sheet

Revision Number: 004.0
Issue date: 02/19/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 3525 Adhesive Visible/UV Light Cure
Product type: Light Curing Adhesive
IDH number: 234691
Item number: 30220
Region: United States

Company address:
Henkel Corporation
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067

Contact information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:
Physical state: Liquid
Color: Clear
Odor: Sharp, Irritating

HEALTH: *2
FLAMMABILITY: 2
PHYSICAL HAZARD: 1

WARNING:
COMBUSTIBLE LIQUID AND VAPOR.
CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
MAY BE HARMFUL IF SWALLOWED OR INHALED.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: May cause respiratory tract irritation. May be harmful if inhaled. May cause irritation to nose and throat.
Skin contact: Causes skin irritation. May cause allergic skin reaction.
Eye contact: Vapors may irritate eyes. Contact with eyes will cause irritation.
Ingestion: May be harmful if swallowed. May cause gastrointestinal tract irritation if swallowed.

Existing conditions aggravated by exposure:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyurethane Methacrylate Resin</td>
<td>Proprietary</td>
<td>30 - 60</td>
</tr>
<tr>
<td>2-Hydroxyethyl methacrylate</td>
<td>868-77-9</td>
<td>10 - 30</td>
</tr>
<tr>
<td>High boiling methacrylate</td>
<td>7534-94-3</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Acrylate monomer</td>
<td>Proprietary</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Hydroxyalkyl methacrylate</td>
<td>27813-02-1</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Acrylic acid</td>
<td>79-10-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Photoinitiator</td>
<td>Proprietary</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Substituted silane</td>
<td>Proprietary</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. If symptoms develop and persist, get medical attention.

Eye contact: Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.

Ingestion: Do not induce vomiting. Keep individual calm. Never give anything by mouth to an unconscious person. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point: 71.1 °C (159.98 °F) Tagliabue closed cup

Autoignition temperature: Not available

Flammable/Explosive limits - lower: Not available

Flammable/Explosive limits - upper: Not available

Extinguishing media: Foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Unusual fire or explosion hazards: None expected.


6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Ensure adequate ventilation. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a partly filled, closed container until disposal.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. Use only with adequate ventilation. Keep away from heat, spark and flame.

Storage: For safe storage, store at or below 38 °C (100.4 °F) Store away from heat, sparks, flames, or other sources of ignition.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.
Hazardous components | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER
--- | --- | --- | --- | ---
Polyurethane Methacrylate Resin | None | None | None | None
2-Hydroxyethyl methacrylate | None | None | None | 3 ppm Ceiling
High boiling methacrylate | None | None | None | None
Acrylate monomer | None | None | None | None
Hydroxyalkyl methacrylate | None | None | None | 1 ppm TWA 3 ppm STEL
Acrylic acid | 2 ppm TWA (SKIN) | None | None | 1 ppm TWA 3 ppm STEL (SKIN)
Photoinitiator | None | None | None | None
Photoinitiator | None | None | None | None
Substituted silane | None | None | None | None
Ethylene glycol | 100 mg/m³ Ceiling Aerosol. | None | None | None

**Engineering controls:**
Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**Respiratory protection:**
Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Eye/face protection:**
Safety goggles or safety glasses with side shields.

**Skin protection:**
Use impermeable gloves and protective clothing as necessary to prevent skin contact. Neoprene gloves. Butyl rubber gloves. Natural rubber gloves.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical state:** Liquid
- **Color:** Clear
- **Odor:** Sharp, Irritating
- **Odor threshold:** Not available
- **pH:** Not applicable
- **Vapor pressure:** < 10 mm Hg (75 °F (23.9 °C))
- **Boiling point/range:** > 300 °F (> 148.9 °C)
- **Melting point/range:** Not available
- **Specific gravity:** 1.1131
- **Vapor density:** Not available
- **Flash point:** 71.1 °C (159.98 °F) Tagliabue closed cup
- **Flammable/Explosive limits - lower:** Not available
- **Flammable/Explosive limits - upper:** Not available
- **Autoignition temperature:** Not available
- **Evaporation rate:** Not available
- **Solubility in water:** Slight
- **Partition coefficient (n-octanol/water):** Not available
- **VOC content:** 0.64 %; 7.12 g/l (process) 0.5 %; 5.57 g/l (potential) 1.14 %; 12.69 g/l (total) (ASTM D5403)
10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Will not occur.


Conditions to avoid: Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyurethane Methacrylate Resin</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2-Hydroxyethyl methacrylate</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>High boiling methacrylate</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Acrylate monomer</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hydroxylalkyl methacrylate</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Acrylic acid</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Photoinitiator</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Photoinitiator</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Substituted silane</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Health Effects/Target Organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyurethane Methacrylate Resin</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>2-Hydroxyethyl methacrylate</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>High boiling methacrylate</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>Acrylate monomer</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>Hydroxylalkyl methacrylate</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>Acrylic acid</td>
<td>Allergen, Corrosive, Irritant, Kidney, Liver</td>
</tr>
<tr>
<td>Photoinitiator</td>
<td>No Records</td>
</tr>
<tr>
<td>Photoinitiator</td>
<td>No Records</td>
</tr>
<tr>
<td>Substituted silane</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information: Not available
13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The shipping classification in this section are for bulk packaging only. Shipping classification may be different for non-bulk packaging as exceptions may apply. Refer to shipping documents for package specific transportation classification.

U.S. Department of Transportation Ground (49 CFR)

- Proper shipping name: Combustible liquid, n.o.s. (Acrylic acid)
- Hazard class or division: Combustible Liquid
- Identification number: NA 1993
- Packing group: III
- Exceptions: Unrestricted, (Not more than 450 Liters)

International Air Transportation (ICAO/IATA)

- Proper shipping name: Not regulated
- Hazard class or division: None
- Identification number: None
- Packing group: None

Water Transportation (IMO/IMDG)

- Proper shipping name: Not regulated
- Hazard class or division: None
- Identification number: None
- Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

- TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
- TSCA 12(b) Export Notification: None above reporting de minimus
- CERCLA/SARA Section 302 EHS: None above reporting de minimus
- CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire
- CERCLA/SARA 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Acrylic acid (CAS# 79-10-7).
- California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

- CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format. 2,3,4,5,8,9,10,11, and 15

Prepared by: Jennifer Glieco, Regulatory Affairs Specialist
DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Henkel Corporation’s products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation’s products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.