Material Safety Data Sheet

1. Product and Company Identification

Product Name: HH-66 Vinyl Cement
Chemical Name: Thermoplastic Polyurethane Adhesive Blend/Compound
Manufacturer: R-H Products Co. Inc. 308 Old High Street Acton, MA USA 01720
Information Telephone Number: 1-978-897-8000
Emergency Telephone Number: 1-800-535-5053 INFOTRAC
Foreign Emergency Telephone Number: 1-352-323-3500 INFOTRAC

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components (Specific Chemical Identity, Common Name(s))</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits Recommended</th>
<th>By Weight % (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone</td>
<td>300 ppm</td>
<td>300 ppm</td>
<td></td>
<td>45.5 %</td>
</tr>
<tr>
<td>Toluene</td>
<td>100 ppm</td>
<td>100 ppm</td>
<td>50 ppm Skin</td>
<td>19.4 %</td>
</tr>
<tr>
<td>Acetone</td>
<td>1000 ppm</td>
<td>750 ppm</td>
<td></td>
<td>21.5 %</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Route(s) of Entry
Primary Inhalation? Yes Skin? Yes Ingestion? Yes

Health Hazards (Acute and Chronic)
Eyes – Liquid mildly irritating. Overexposure may also cause irritation. Skin – Prolonged contact can cause irritation and possible dermatitis. Breathing – Overexposure may cause irritation to respiratory system. Extreme overexposure to vapors may result in central nervous system, liver and kidney damage. Ingestion – May cause gastrointestinal irritation.

Carcinogenicity None (No)
NTP? N/A IARC Monographs? N/A OSHA Regulated? N/A

Signs and Symptoms of Exposure
Eyes – Redness, tearing and swelling. Skin – Dryness of skin including cracking. Breathing – Overexposure includes dizziness, headache, nausea, and light headedness. Swallowing – Nausea, vomiting, and diarrhea

Medical Conditions
Skin – Prolonged contact will irritate skin and may cause dermatitis. Breathing – Extreme overexposure to vapors may cause nervous system damage. Swallowing – May cause nausea, vomiting and diarrhea. Aspiration into the lungs as a result of vomiting may cause lung damage.
4. First Aid Measures

Emergency and First Aid Procedures
- Eye contact – Flush immediately with water. Call a physician.
- Skin contact – Wash area with soap and water. Call a physician.
- Breathing – Move affected person to fresh air at once. Restore breathing. Call a physician if difficulties persist.
- If swallowed – DO NOT INDUCE VOMITING. Call a physician. Give water to victim. If vomiting occurs, prevent aspiration into lungs by lowering head between knees.

5. Fire Fighting Measures

Flash Point (Method Used) | -5.5C (22F) ASTM D-56 9/21/2008 | Flammable Limits | LEL 1% | UEL 12%

Extinguishing Media
- FOAM, DRY CHEMICAL, CO₂

Special Fire Fighting Procedures
- Fire Fighters should be equipped with self-contained breathing apparatus when fighting fires involving this material.

Unusual Fire and Explosion Hazards
- Extremely Flammable. Overheated, closed container near a fire could explode due to pressure buildup.

6. Accidental Release Measures

Steps to Be Taken in Case Material Is Released or Spilled
- Extinguish all sources of ignition in area. Collect spilled material and place in a closed container for disposal or salvage.

7. Handling and Storage

Precautions to Be Taken in Handling and Storing
- Keep away from heat; open flames and sparks. Use and store with adequate ventilation to prevent vapor buildup. Vapors released by product can easily ignite.

Other Precautions
- Avoid contact with skin and eyes. Avoid prolonged breathing of vapors. Keep container closed when not in use.
- KEEP OUT OF REACH OF CHILDREN

8. Exposure Control/Personal Protection
Respiratory Protection

If exposure exceeds occupational exposure limits use a NIOSH approved respirator to prevent overexposure. Per 29 CFR 1910.134 CCROV or SA types recommended.

Ventilation Local Exhaust

Should be used to maintain exposure below TLV(s)

Special

Explosion proof ventilation maybe required to control vapor concentrations.

Mechanical (General)

Should be used to maintain exposure below TLV(s)

Other

N/D

Protective Gloves

Impervious gloves; (for Solvent)

Eye Protection

Chemical goggles or safety glasses

Other Protective Clothing or Equipment

Work apron to avoid contact with personal clothing and skin.

Work/Hygienic Practices

Keep area clean. Wash hands thoroughly after working with product.

9. Physical and Chemical Properties

Boiling Point

Acetone (Component) 132°F

Specific Gravity (H2O = 1) Approx. .88

Vapor Pressure (mm Hg) at 68°F Not established

Melting Point N/D

Vapor Density (AIR = 1) Heavier

Evaporation Rate (Butyl Acetate = 1) Slower

Solubility in Water Insoluble in water

Appearance and Odor

Normal Physical State: Clear Liquid with Strong Aromatic Odor/sharp mint like fragrance

10. Stability and Reactivity

Stability

Unstable

Stable

Conditions to Avoid

X

N/A

Incompatibility (Materials to Avoid)

Oxidizing Agents

Hazardous Decomposition or Byproducts

CO₂ and CO when subjected to flames or excessive heat

Hazardous Polymerization

May Occur

Will Not Occur

Conditions to Avoid

X

N/A

11. Toxicological Information

Route(s) of Entry: Skin contact, inhalation, eye contact and ingestion. Irritant. No other data.
12. Ecological Information

No data available

13. Disposal Considerations

<table>
<thead>
<tr>
<th>Waste Disposal Method</th>
<th>Dispose in accordance with local and current U.S. E.P.A. regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. E.P.A. Hazardous Waste Number:</td>
<td>D001 (Ignitable) (MEK -1/91 D:035)</td>
</tr>
</tbody>
</table>

14. Transport Information

DOT Info: UN1133 ADHESIVES 3 PGII

UN1133 ADHESIVES 3 PGII LTD. QTY. (1.3gal)

Optional information: Consumer Commodity ORM-D until 1-1-2014
IMO Information: see US DOT above.
ERG #128

15. Regulatory Information

Federal and State and Other regulations:
Toluene and Methyl Ethyl Ketone are subject to the reporting requirements of section 313 of SARA Title III
TASCA 8(b) inventory: all components are listed.
Components only are listed under various state RTK and reporting lists.
EINECS: Components are on the European Inventory of Existing Commercial Chemical Substances
WHMIS (Canada) Class B-2 (flash point) and Class D-2B (toxic)
DSCL (EEC) Components listed as R11 Highly flammable, R36/37 Irritating to eyes and respiratory system, S2 Keep out of reach of children, S16 Keep away from sources of ignition- No smoking, S26-In case of contact with eyes, rinse immediately with plenty of water and seek medical advise.
16. Other Information

**Regulated VOC’s by weight 64.9% - 4.55 lbs/gal - 544 g/l**

HMIS Ratings: Health-1; Flammability-3; Reactivity-0  
Key- 4 Extreme, 3 High, 2 Moderate, 1 Slight

NFPA Ratings: Health-2; Flammability-3; Reactivity-0

**Dated January 4, 2012**

The information above is believed to be accurate and represents the information currently available to us. We however, make no warranty of merchantability or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from its use.