HH-66 Vinyl Cement
Safety Data Sheet
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 01/05/2015 Date of issue: 01/05/2015 Supersedes Date: 05/08/2013 Version: 1.0

01/05/2015 EN (English US) 1/8

SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: HH-66 Vinyl Cement
Synonyms: Thermoplastic Polyurethane Adhesive Blend/Compound

1.2. Intended Use of the Product: No additional information available

1.3. Name, Address, and Telephone of the Responsible Party
Company
RH Products Co., Inc.
308 Old High Street
Acton, MA USA 01720
Information Telephone Number: 1-978-897-8000

1.4. Emergency Telephone Number
Emergency Number: 1-800-535-5053 INFOTRAC; 1-352-323-3500 INFOTRAC International

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)
Flam. Liq. 2 H225
Eye Irrit. 2A H319
Repr. 2 H361
STOT SE 3 H336
STOT RE 2 H373

2.2. Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US):

Signal Word (GHS-US): Danger
Hazard Statements (GHS-US):
H225 - Highly flammable liquid and vapor.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H361 - Suspected of damaging fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements (GHS-US):
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe vapors, mist, spray.
P264 - Wash hands, forearms, and exposed areas thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, protective clothing, protective gloves.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a poison center if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂) to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P235+P405 - Keep cool. Store locked up.
P501 - Dispose of contents/container according to local, regional, national, and international regulations.

2.3. Other Hazards
No additional information available

2.4. Unknown Acute Toxicity (GHS-US)
No data available

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ethyl ketone</td>
<td>(CAS No) 78-93-3</td>
<td>44</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H336</td>
</tr>
<tr>
<td>Acetone</td>
<td>(CAS No) 67-64-1</td>
<td>34</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H336</td>
</tr>
<tr>
<td>Proprietary Component</td>
<td>Proprietary*</td>
<td>14.1</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repr. 2, H361</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H336</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT RE 2, H373</td>
</tr>
<tr>
<td>Toluene</td>
<td>(CAS No) 108-88-3</td>
<td>7.9</td>
<td>Asp. Tox. 1, H304</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 2, H401</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 3, H412</td>
</tr>
</tbody>
</table>

*The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Full text of H-phrases: see section 16

**SECTION 4: FIRST AID MEASURES**

4.1. Description of First Aid Measures
First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid Measures After Inhalation: Using proper respiratory protection, immediately move the exposed person to fresh air. Assure fresh air breathing. Call a physician if symptoms occur.
First-aid Measures After Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.
First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/Injuries: Causes serious eye irritation. Vapors may cause drowsiness and dizziness.
Symptoms/Injuries After Inhalation: High concentration of vapours may induce: headache, dizziness, drowsiness, nausea and vomiting.
Symptoms/Injuries After Skin Contact: Repeated exposure may cause skin dryness or cracking.
Symptoms/Injuries After Eye Contact: Causes serious eye irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure. May cause damage to central nervous system, liver, and kidneys. Suspected of damaging fertility or the unborn child.
4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor.

Explosion Hazard: May form flammable/explosive vapor-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity: Reacts violently with oxidants causing fire and explosion hazard.

5.3. Advice for Firefighters

Precautionary Measures: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not get water inside containers. Do not apply water stream directly at source of leak. Fight fire from safe distance and protected location.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not get in eyes, on skin, or on clothing. Do not breathe vapour or mist.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).


6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Eliminate ignition sources. Stop leak if safe to do so.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Use only non-sparking tools.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place.


7.3. Specific End Use(s) No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>USA ACGIH ACGIH TWA (ppm)</th>
<th>USA NIOSH NIOSH REL (TWA) (mg/m³)</th>
<th>USA NIOSH NIOSH REL (TWA) (ppm)</th>
<th>USA NIOSH NIOSH REL (STEL) (mg/m³)</th>
<th>USA NIOSH NIOSH REL (STEL) (ppm)</th>
<th>USA IDLH US IDLH (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>20 ppm</td>
<td>375 mg/m³</td>
<td>100 ppm</td>
<td>560 mg/m³</td>
<td>150 ppm</td>
<td>500 ppm</td>
</tr>
</tbody>
</table>
HH-66 Vinyl Cement
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Gas detectors should be used when flammable gases/vapors may be released. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated above. All electrical equipment should comply with the National Electric Code. Ensure all national/local regulations are observed.


Materials for Protective Clothing: Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

| Physical State | Liquid |
| Appearance | Clear |
| Odor | Strong Aromatic Odor/sharp mint like fragrance |
| Odor Threshold | No data available |
| pH | No data available |
| Evaporation Rate | No data available |
| Melting Point | No data available |
| Freezing Point | No data available |
| Boiling Point | > 35 °C (95.00 °F) |
| Flash Point | -14 °C ASTM D-56 (6.80 °F) |
| Auto-ignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Flammability (solid, gas) | No data available |
HH-66 Vinyl Cement  
Safety Data Sheet  
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Vapor Pressure : No data available  
Relative Vapor Density at 20 °C : > 1 (heavier than air)  
Relative Density : 0.88 (water = 1)  
Solubility : Insoluble in water.  
Partition Coefficient: N-octanol/water : No data available  
Viscosity : No data available  
Lower Flammable Limit : 1 %  
Upper Flammable Limit : 12 %  

9.2. Other Information  
VOC content : 51.9 % (3.59 lbs/gal or 430 g/l)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Reacts violently with oxidants causing fire and explosion hazard.  
10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).  
10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.  

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects  
Acute Toxicity: Not classified  
Toluene (108-88-3)  
LD50 Oral Rat 5580 mg/kg  
LD50 Dermal Rabbit 8390 mg/kg  
ATE (Vapors) 25.70 mg/l/4h  
Acetone (67-64-1)  
LD50 Oral Rat 5800 mg/kg  
LD50 Dermal Rabbit 15688 mg/kg  
LC50 Inhalation Rat 44 g/m³  
Methyl ethyl ketone (78-93-3)  
LD50 Oral Rat 2054 mg/kg  
LD50 Dermal Rat > 10 ml/kg  
LC50 Inhalation Rat 23500 mg/m³ (Exposure time: 8 h)

Skin Corrosion/Irritation: Not classified  
Serious Eye Damage/Irritation: Causes serious eye irritation.  
Respiratory or Skin Sensitization: Not classified  
Germ Cell Mutagenicity: Not classified  
Carcinogenicity: Not classified  

Toluene (108-88-3)  
IARC group 3  
Reproductive Toxicity: Suspected of damaging fertility or the unborn child.  
Specific Target Organ Toxicity (Single Exposure): May cause drowsiness or dizziness.  
Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.  
Aspiration Hazard: Not classified  
Symptoms/Injuries After Inhalation: High concentration of vapours may induce: headache, dizziness, drowsiness, nausea and vomiting.  
Symptoms/Injuries After Skin Contact: Repeated exposure may cause skin dryness or cracking.  
Symptoms/Injuries After Eye Contact: Causes serious eye irritation.  
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.  
Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure. May cause damage to central nervous system, liver, and kidneys. Suspected of damaging fertility or the unborn child.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity  
Toluene (108-88-3)  
LC50 Fish 1 15.22 - 19.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])  
EC50 Daphnia 1 5.46 - 9.83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
**HH-66 Vinyl Cement**

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>LC 50 Fish 2</th>
<th>12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 2</td>
<td>11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>NOEC chronic crustacea</td>
<td>0.74 mg/l (Ceriodaphnia dubia)</td>
</tr>
</tbody>
</table>

**Acetone (67-64-1)**

<table>
<thead>
<tr>
<th>LC50 Fish 1</th>
<th>4144.846 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 1</td>
<td>1679.66 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])</td>
</tr>
<tr>
<td>LC 50 Fish 2</td>
<td>6210 (6210 - 8120) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>12600 (12600 - 12700) mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
</tbody>
</table>

**Methyl ethyl ketone (78-93-3)**

<table>
<thead>
<tr>
<th>LC50 Fish 1</th>
<th>3130 (3130 - 3320) mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 1</td>
<td>520 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>5091 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
</tbody>
</table>

**12.2. Persistence and Degradability**

**12.3. Bioaccumulative Potential**

Toluene (108-88-3)

| Log Pow | 2.65 |

**Acetone (67-64-1)**

| BCF fish 1 | 0.69 |
| Log Kow | -0.24 |

**Methyl ethyl ketone (78-93-3)**

| Log Pow | 0.29 |

**12.4. Mobility in Soil**

No additional information available

**12.5. Other Adverse Effects**

Other Information: Avoid release to the environment.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable. RCRA Waste Number: D001.

**SECTION 14: TRANSPORT INFORMATION**

**14.1. In Accordance with DOT**

Proper Shipping Name: ADHESIVES containing a flammable liquid

Hazard Class: 3

Identification Number: UN1133

Label Codes: 3

Packing Group: II

ERG Number: 128

**14.2. In Accordance with IMDG**

Proper Shipping Name: ADHESIVES

Hazard Class: 3

Identification Number: UN1133

Packing Group: II

Label Codes: 3

EmS-No. (Fire): F-E

EmS-No. (Spillage): S-D

MFAG Number: 127

**14.3. In Accordance with IATA**

Proper Shipping Name: ADHESIVES

Packing Group: II

Identification Number: UN1133

Hazard Class: 3

Label Codes: 3
### HH-66 Vinyl Cement

**Safety Data Sheet**

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

---

**ERG Code (IATA)**: 3L

### SECTION 15: REGULATORY INFORMATION

#### 15.1 US Federal Regulations

<table>
<thead>
<tr>
<th>HH-66 Vinyl Cement</th>
<th>SARA Section 311/312 Hazard Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire hazard</td>
<td>Immediate (acute) health hazard</td>
</tr>
<tr>
<td></td>
<td>Delayed (chronic) health hazard</td>
</tr>
</tbody>
</table>

**Toluene (108-88-3)**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory
- Listed on United States SARA Section 313

**RQ (Reportable quantity, section 304 of EPA's List of Lists)**: 1000 lb

**SARA Section 313 - Emission Reporting**: 1.0 %

**Acetone (67-64-1)**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory

**EPA TSCA Regulatory Flag**: T - T indicates a substance that is the subject of a Section 4 test rule under TSCA.

**Methyl ethyl ketone (78-93-3)**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory

**Proprietary Component**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2 US State Regulations

**Toluene (108-88-3)**

- U.S. - California - Proposition 65 - Developmental Toxicity
  - WARNING: This product contains chemicals known to the State of California to cause birth defects.
- U.S. - California - Proposition 65 - Reproductive Toxicity – Female
  - WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.

**Toluene (108-88-3)**

- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
- U.S. - Pennsylvania - RTK (Right to Know) List

**Acetone (67-64-1)**

- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
- U.S. - Pennsylvania - RTK (Right to Know) List

**Methyl ethyl ketone (78-93-3)**

- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
- U.S. - Pennsylvania - RTK (Right to Know) List

---

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date**: 01/05/2015

**Other Information**: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**GHS Full Text Phrases**:

<table>
<thead>
<tr>
<th>Aquatic Acute 2</th>
<th>Hazardous to the aquatic environment - Acute Hazard Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Chronic 3</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 3</td>
</tr>
<tr>
<td>Asp. Tox. 1</td>
<td>Aspiration hazard Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids Category 2</td>
</tr>
<tr>
<td>Repr. 2</td>
<td>Reproductive toxicity Category 2</td>
</tr>
</tbody>
</table>

01/05/2015 EN (English US) 7/8
Skin Irrit. 2 | Skin corrosion/irritation Category 2
---|---
STOT RE 2 | Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3 | Specific target organ toxicity (single exposure) Category 3
H225 | Highly flammable liquid and vapor
H304 | May be fatal if swallowed and enters airways
H315 | Causes skin irritation
H319 | Causes serious eye irritation
H336 | May cause drowsiness or dizziness
H361 | Suspected of damaging fertility or the unborn child
H373 | May cause damage to organs through prolonged or repeated exposure
H401 | Toxic to aquatic life
H412 | Harmful to aquatic life with long lasting effects

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.

SDS US (GHS HazCom)