1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
TRADE NAME: TWP-LV1 Adhesive Primer
LABEL: TAMKO
PRODUCT USE & DESCRIPTION: For waterproofing
CHEMICAL FAMILY: Not applicable

MANUFACTURED FOR: TAMKO Building Products, Inc.
P. O. Box 1404
Joplin, MO 64802-1404
www.TAMKO.com

2. HAZARDS IDENTIFICATION
SIGNAL WORD: Warning
GHS CLASSIFICATION:
- Skin Irritation – Category 2
- Eye Irritation – Category 2B
- Specific Target Organ Toxicity, Single Exposure – Category 3
- Flammable Liquid – Category 3

HAZARD STATEMENTS:
- Causes skin and eye irritation.
- May cause respiratory irritation.
- Flammable liquid and vapor.

PRECAUTIONARY STATEMENTS:
Prevention
- Avoid breathing dust/fume/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.
- Ground/bond container and receiving equipment. Take precautionary measures against static discharge.
- Use only non-sparking tools. Keep away heat/sparks/open flames/hot surfaces. - No smoking.
- Use explosion-proof equipment. Wash hands and exposed skin thoroughly after handling.
- Keep container tightly closed. Use only outdoors or in a well ventilated area.

Response
- If on skin: Wash with plenty of water. Get medical advice/attention: If exposed or concerned or you feel unwell, if eye and or skin irritation persists.
- Specific treatment: See section 4-First Aid
- In case of fire: See Section 5.
- If on skin (or hair): Take off immediately all contaminated clothing, wash before reuse. Rinse skin with water/shower.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If inhaled, remove person to fresh air and keep comfortable for breathing.

Storage
- Store locked up, in a well-ventilated place. Keep cool.

Disposal
- Dispose in accordance with Federal, State, and Local regulations. (See section 13 for additional information).

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>10-20</td>
</tr>
<tr>
<td>Red Iron Oxide</td>
<td>1332-37-2</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Tert-butyl acetate</td>
<td>540-88-5</td>
<td>25-35</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>2-10</td>
</tr>
<tr>
<td>Tert-butyl alcohol</td>
<td>75-65-0</td>
<td>0.1-2</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>0.01-1</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
EYE CONTACT: Remove contact lenses. Flush eyes with large amounts of water for at least 20 minutes. Seek medical attention.
SKIN CONTACT: Remove and launder contaminated clothing. Wash affected area thoroughly with soap and water. DO NOT use solvents or thinners.
INGESTION: DO NOT induce vomiting. Get medical attention immediately. Provide SDS to medical personnel.
INHALATION: Remove to fresh air. Keep warm and at rest. Restore breathing. Seek medical attention.
NOTES TO PHYSICIAN: Treat symptomatically. Contact poison control and/or seek medical attention as needed.

5. FIRE FIGHTING MEASURES
EXTINGUISHING MEDIA: Carbon dioxide, Dry chemical, Foam, Water spray fog
UNSUITABLE EXTINGUISHING MEDIA: Avoid solid water stream as this may spread flammable liquid.
SPECIAL FIRE FIGHTING PROCEDURES: Full protective equipment and self-contained breathing apparatus should be used.
UNUSUAL FIRE OR EXPLOSION HAZARDS: Closed containers may explode or auto ignite when exposed to extreme heat.
Vapors may spread long distances and ignite. Vapors may form explosive mixtures with air. During emergency conditions, exposure to burning product may cause health hazard. Symptoms may not be immediately apparent. Seek medical attention.
SEE SECTION 10 FOR COMBUSTION PRODUCTS
6. ACCIDENTAL RELEASE MEASURES
PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED: Avoid inhalation, ingestion, and contact with skin or eyes. Remove all sources of ignition. Ventilate area. Wear appropriate PPE (Personal Protective Equipment). Contact appropriate authorities needed, if necessary, for immediate action and containment. Do not allow to enter drains or water courses. In case of sewer or drain contamination, contact local water company; water stream contamination, contact EPA. Ventilate area. Dike area with inert material. Remove product with inert absorbent, shovel or sweep up. Keep in suitable containment for approved disposal. Spills entering surface waters or sewers entering/leading to surface waters that cause a sheen must be reported to the National Response Center 1-800-424-8802.

7. HANDLING AND STORAGE
STORAGE TEMPERATURE: Store in designated flammable area NFPA 30 and OSHA 29 CFS 1910.106 approved. Store in original containers or approved container with complete and appropriate labeling. Keep out of direct sunlight and in a cool, dry, well ventilated area; away from incompatible materials, oxidizing materials, and food or drink. Store away from heat, spark, open flame, or all other ignition sources. Keep container tightly sealed until use. Open containers must be carefully resealed and stored upright to prevent leakage. Avoid exposure to oxygen; exposure may increase the instance of exothermic reaction, resulting in smoldering and potential combustion. Improper storage may result in spontaneous generation of heat and ignition.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Use appropriate protective equipment. Use only adequate ventilation; wear appropriate respirator when ventilation is inadequate. Do not breathe dust, vapor mist, or gas. Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not ingest or get on eyes, skin, and clothing. Eating, drinking, and smoking should be prohibited in areas where this material is handled, processed, and/or stored. Wash hands and face thoroughly before eating and drinking. Take precautionary measures against electrostatic discharge. Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion proof electrical ventilating, lighting, and material handling equipment. Follow US NFPA 30, "Flammable & Combustible Liquids Code," or other national, state, and local codes on the safe handling of flammable liquids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>OSHA TWA</th>
<th>STEL</th>
<th>ACGIH TWA</th>
<th>STEL</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>100</td>
<td>NE</td>
<td>100</td>
<td>NE</td>
<td>ppm</td>
</tr>
<tr>
<td>Red Iron Oxide</td>
<td>1332-37-2</td>
<td>15/5*</td>
<td>NE</td>
<td>10/3*</td>
<td>NE</td>
<td>mg/m³</td>
</tr>
<tr>
<td>Tert-butyl acetate</td>
<td>540-88-5</td>
<td>200</td>
<td>NE</td>
<td>200</td>
<td>NE</td>
<td>ppm</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>750</td>
<td>1000</td>
<td>500</td>
<td>750</td>
<td>ppm</td>
</tr>
<tr>
<td>Tert-butyl alcohol</td>
<td>75-65-0</td>
<td>100</td>
<td>NE</td>
<td>100</td>
<td>NE</td>
<td>ppm</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>300</td>
<td>NE</td>
<td>100</td>
<td>NE</td>
<td>ppm</td>
</tr>
</tbody>
</table>

NE= Not established.
Note: Due to the form of the product, hazardous exposures from this product are not expected to occur. Gloves must be worn when handling and adequate ventilation must be provided during roofing related activities.
* Total Nuisance Dust/Respirable Dust.
Exposure Controls/Personal Protection: Use only with adequate ventilation. Avoid contact with skin and eyes. Avoid breathing vapor or spray mist. Respiratory protection may be needed if adequate ventilation cannot be obtained. Eye protection should be used at all times when using this product. Intentional misuse by deliberate concentration and inhalation of this product can be harmful or fatal.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance and Odor: | Clear Liquid with Ketone odor |
| Odor Threshold       | No Data Available             | Upper/Lower Flammability or Explosive Limits: LEL 2% UEL 8% |
| pH:                   | Not Applicable                | Vapor Pressure: 23 (mm Hg) |
| Boiling Point:        | 232 ºF                       | Vapor Density (Air = 1): 2 |
| Melting Point:        | No Data Available             | Specific Gravity/Relative Density: No Data Available |
| Flash Point:          | -4 ºF                        | Initial Boiling Point and Boiling Range: see BOILING POINT |
| Autoignition Temperature: | No Data Available             | Evaporation Rate (Ether=1): 2 |
| Viscosity:            | >Water                        | Flammability (Solid and Gas): Class 3 Flammable |
| Decomposition Temperature: | No Data Available             | Partition Coefficient: N-Octanol/Water: No Data Available |

10. STABILITY AND REACTIVITY
reactivity: Stable under normal conditions
CHEMICAL STABILITY: Stable under the recommended storage and handling conditions (see Section 7); hazardous polymerization will not occur.
CONDITIONS TO AVOID: Freezing, direct sunlight, high heat. All possible ignition, spark or flame sources. Do not pressurize, cut, braze drill, grind, or heat containers. Avoid pure oxygen.
MATERIALS TO AVOID: Keep away from oxidizing agents and strongly alkaline and acidic materials to prevent the possibility of exothermic reaction.
HAZARDOUS DECOMPOSITION: Under normal conditions, hazardous decomposition should not occur. In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, and oxides of nitrogen may be produced.
11. **TOXICOLOGICAL INFORMATION**

**EYE** – Can cause eye irritation.

**SKIN** – Can cause skin irritation.

**INHALATION** – Cured product particles, fume and vapor may cause upper respiratory irritation.

**INGESTION** – May cause harmful effects if swallowed.

THE FOLLOWING COMPONENT DATA IS PROVIDED FOR USER INFORMATION:

**TOLUENE**

Cancer - This product contains toluene which is not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**Acute Effects** - Inhalation of cured product particles, fumes, vapors, or mist may cause respiratory tract, eye, skin, and lung irritation. Inhalation may cause central nervous system depression. Inhalation of high concentrations (>200 ppm) of toluene are associated with CNS encephalopathy, headache, depression, lassitude (weakness, exhaustion), impaired coordination, transient memory loss, and impaired reaction time. If ingested, may cause effects similar to those for inhalation exposure. Aspiration into the lungs may result in chemical pneumonitis, which may be fatal.

**Chronic Effects** – Target organs include kidneys, CNS, liver, respiratory system, eyes, and skin. Prolonged or repeated skin contact may cause defatting and dermatitis. Repeated exposure in combination with constant, loud noise can produce hearing loss or dizziness. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest, damage of the brain, liver, kidney and to death. Toluene is a suspected reproductive hazard (EU, Korea, and New Zealand all have classified for GHS as Reproductive Toxicity Category 2, and Japan a Category 1A).

**ACETONE**

Cancer - This product contains acetone which is not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**Acute Effects** - Inhalation of cured product particles, fumes, vapors, or mist may cause eye, skin, respiratory tract and digestive tract irritation. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Inhalation may cause motor incoordination and speech abnormalities. Ingestion may cause CNS depression, characterized by excitation, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma, and possible death due to respiratory failure. Eye contact may cause irritation, stinging, tearing, redness, and swelling. Aspiration into the lungs may result in chemical pneumonitis, which may be fatal.

**Chronic Effects** – Target organs include CNS, respiratory system, eyes, and skin. Prolonged or repeated skin contact may cause drying, cracking, or dermatitis. Chronic inhalation may cause effects similar to those of acute inhalation.

12. **ECOLOGICAL INFORMATION:**

**Ecotoxicity** – This product has been assessed following the conventional method and is not classified as dangerous for the environment but contains substances dangerous for the environment. The product should not be allowed to enter drains or watercourses or be deposited where it can affect ground or surface waters. The Air Pollution Control requirements of relations made under the Environmental Protection Act may apply to this use of this product.

13. **DISPOSAL CONSIDERATIONS:**

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions, and any by-product should, at all times, comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. This product should not be allowed to enter drains or watercourses or be deposited where it can affect ground or surface waters and soil. Empty containers should be disposed of in accordance with local requirements.

14. **TRANSPORT INFORMATION:**

UN Number: 1133

UN Proper Shipping Name: Adhesive

Transport Class: 3

Packing Group Number: II

Environmental Hazard: Yes

Special Precautions: Flammable Liquid

15. **REGULATORY INFORMATION**

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** Some components in this product are listed on the TSCA Inventory.

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):** None

**SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III:**

Section 302 Extremely Hazardous Substances: None.

Section 311/312 Hazard Categories: See Section 2 of the SDS.

Section 313 Reportable Ingredients: Section 313 Reportable Ingredients: This material contains the following chemicals which are subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Concentration (% by Wt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>10-20</td>
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<td>Tert-butyl alcohol</td>
<td>75-65-0</td>
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California Proposition 65: **WARNING:** Cancer and Reproductive Harm – www.P65Warnings.ca.gov/product.
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Rating</th>
<th>NFPA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health - * 3</td>
<td>Health - 2</td>
</tr>
<tr>
<td>Flammability - 2</td>
<td>Flammability - 3</td>
</tr>
<tr>
<td>Reactivity - 0</td>
<td>Reactivity - 0</td>
</tr>
</tbody>
</table>

Preparation Date: September 2018
Revision Date: February 2019
Revisions: Updated Header (Date and T code). Updated Section 313 Reportable Ingredients in Section 15.

Disclaimer of Liability

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The information and recommendations are offered for the user’s consideration and examination, and it is the user’s responsibility to satisfy his or herself that they are suitable and complete for the user’s particular use.