1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: TAM STAR White Elastomeric Coating, TAM-GUARD White Elastomeric Coating, TAM STAR White Patching Cement
LABEL: TAM STAR, TAM-GUARD
USE & DESCRIPTION: Elastomeric Coating, Patching Cement
CHEMICAL FAMILY: Acrylic polymer

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

2. HAZARDS IDENTIFICATION

SIGNAL WORD: Danger
GHS CLASSIFICATION: Carcinogenicity – Category 1A
Sensitization (Skin) – Category 1

HAZARD STATEMENTS:
May cause cancer.
May cause allergic skin reaction.
Additional hazard information: Can cause silicosis and other permanent lung damage.

PRECAUTIONARY STATEMENTS:

Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Avoid breathing vapors Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing must not be allowed out of the workplace.

Response
If on skin: Wash with plenty of water. Get medical advice/attention: If exposed or concerned or you feel unwell, if skin irritation persists.
Specific treatment: See section 4-First Aid In case of fire: See Section 5.
Take off immediately clothing and wash before reuse.

Storage
Store locked up.

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>Titanium(IV) oxide</td>
<td>13463-67-7</td>
<td>2-4</td>
</tr>
<tr>
<td>Thickening clay</td>
<td>12174-11-7</td>
<td>0.1-3</td>
</tr>
<tr>
<td>Silica</td>
<td>14808-60-7</td>
<td>0.1-1</td>
</tr>
<tr>
<td>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate</td>
<td>25265-77-4</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Dimethyl Oxazolidene</td>
<td>1200-87-4</td>
<td>0.1-1</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of cool water for at least 20 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation persists.
SKIN CONTACT: Clean any exposed skin with warm soapy water if possible. If not, and a waterless hand cleaner is used, it should be without pumice. Do not use solvents or thinners to remove material from skin. Get medical attention if irritation persists or develops.
INGESTION: If swallowed, do not induce vomiting. If vomiting occurs, keep head lower than hips to avoid aspiration of vomit into the lungs which can cause inflammation or pneumonitis. Call poison control center or get immediate medical attention.
INHALATION: If inhalation of cured product particles, fumes, vapors, or mist occurs, remove person to fresh air. Drink water to clear throat or blow nose to clear. If not breathing, give artificial respiration or give oxygen by trained personnel and get immediate medical attention.
NOTES TO PHYSICIAN: Treatment should be based on removing the source of irritation with treatment of symptoms as necessary.

5. FIRE FIGHTING MEASURES


SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should not enter confined spaces without wearing a National Institute for Occupational Safety and Health (NIOSH) approved positive pressure self-contained breathing apparatus (SCBA) with full face mask and full protective equipment. Water may be used to cool containers in a fire-exposed area.

SEE SECTION 10 FOR COMBUSTION PRODUCTS.

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED: Take up liquid spill into absorbent material. Notify authorities as required by law.
WASTE DISPOSAL METHODS: Dispose in accordance with applicable Federal, State, and Local regulations. Do not burn.
7. HANDLING AND STORAGE
PRECAUTIONS FOR SAFE HANDLING: Ensure good ventilation of the work station. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing vapors.
HYGIENE MEASURES: Launder working clothes separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
STORAGE CONDITIONS: Store in secure well-ventilated place. Keep cool.
INCOMPATIBLE MATERIALS: Avoid contact with strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Raw Products</td>
<td></td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Titanium(IV) oxide</td>
<td>13463-67-7</td>
<td>15</td>
<td>NE</td>
</tr>
<tr>
<td>Silica</td>
<td>14808-60-7</td>
<td>0.05</td>
<td>NE</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.

RESPIRATORY PROTECTION: Normally not needed in well-ventilated areas. If applicable exposure standards are exceeded or can be exceeded, use a NIOSH approved air-purifying respirator. If concentrations are sufficiently high that this respirator is inadequate, or high enough to cause oxygen deficiency, use a positive pressure self-contained breathing apparatus (SCBA). Follow all applicable respirator/SCBA use, fitting, training standards, and regulations.

VENTILATION: Use only with adequate ventilation to maintain exposures below applicable exposure limits. Local exhaust ventilation and/or enclosure of the process may be required. All equipment must be explosion proof.

EYE PROTECTION: Chemical safety goggles with side-shields or face shield must be used if eye contact is possible.

SKIN: Chemical resistant gloves, apron, or other protective clothing needed to prevent skin contact. Remove and clean contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White liquid, ammonia odor
Odor Threshold: No data available.
pH: No data available.
Boiling Point: 212 ºF
Melting Point: No data available.
Flash Point: No data available.
Autoignition Temperature: No data available.
Viscosity: No data available.
Decomposition Temperature: No data available.

Upper/Lower Flammability or Explosive Limits: No data available.
Vapor Pressure: No data available.
Density: 1.24 g/cm^3.
Specific Gravity/Relative Density: No data available.
Solubility (IES): Negligible
Initial Boiling Point and Boiling Range: No data available.
Evaporation Rate (Butyl Acetate = 1): No data available.
Flammability(Solid and Gas): No data available.
Partition Coefficient: N-Octanol/Water: No data Available

10. STABILITY AND REACTIVITY
STABILITY: Stable
REACTIVITY: Non-reactive.
CONDITIONS TO AVOID: Avoid contact with strong oxidizing agents. Prevent vapor accumulation.
HAZARDOUS REACTION: Polymerization will not occur.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong acids or bases, oxidizing agents and selected amines.

11. TOXICOLOGICAL INFORMATION
SKIN – Can cause skin irritation.
INHALATION – Cured product particles, fume, vapor, or mist may cause upper respiratory irritation.
INGESTION – May cause harmful effects if swallowed.

THE FOLLOWING COMPONENT DATA IS PROVIDED FOR USER INFORMATION:

SILICA
Cancer - This product contains crystalline silica (quartz). IARC has determined that crystalline silica inhaled in the form of quartz from occupational sources is carcinogenic to humans (Group 1). IARC concluded that there was sufficient evidence in humans and animals for the carcinogenicity of inhaled crystalline silica in the form of quartz from occupational sources. The NTP has classified silica as known to be a human carcinogen. The physical nature of this product may help limit any inhalation hazard from crystalline silica during application and in its hardened state. However, physical forces such as sawing, grinding, drilling and other demolition work on this product may liberate crystalline silica dust.

Acute Effects - Exposure to silica dust can cause irritation of the eyes, nose and throat. Exposure to high concentrations can also cause Accelerated Silicosis causing progressive shortness of breath, fever, coughing, and weight loss.
Chronic Effects – In addition to cancer, breathing of silica over a period of time can cause damage to the lung tissue or silicosis after long exposure at low concentrations causing shortness of breath, fever, coughing, and weight loss. Prolonged and repeated exposure to respirable silica- containing dust may cause autoimmune disease, kidney disease, tuberculosis, and nonmalignant respiratory disease, and bronchitis.
TITANIUM DIOXIDE
Cancer - Titanium dioxide has recently been classified by the International Agency for Research on Cancer (IARC) as Group 2B "possibly carcinogen to humans". IARC determined that high concentrations of pigment-grade (powdered) and ultrafine titanium dioxide dust caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation. The series of biological events or steps that produced the rat lung cancers (e.g. particle deposition, impaired lung clearance, cell injury, fibrosis, mutations and ultimately cancer) have also been seen in people working in dusty environments. Therefore, IARC considered the animal data relevant to people doing jobs with exposures to titanium dioxide dust.

Acute Effects - Skin exposure to titanium dioxide is a mild irritant and may cause mechanical irritation (irritation from frictional action but is believed not to be absorbed through intact skin.

Dust may cause mechanical irritation (irritation from frictional action) of eyes. May cause gastrointestinal (digestive) tract irritation with nausea, vomiting and diarrhea if swallowed. It is not absorbed following ingestion. Dust may be harmful if inhaled and causes respiratory tract irritation. May affect respiration and blood.

Chronic Effects - Heavy occupational dust exposures may cause chronic rhinitis, chronic bronchitis, impaired pulmonary function, resemblance of silicosis without any fibrosis, functional change in trachea or bronchi, chronic pulmonary edema.

12. ECOLOGICAL INFORMATION
Ecotoxicity – No specific data available on this product. This product may cause adverse environmental effects if used improperly or released to the environment through a spill. Use best management practices to prevent this material from entering storm sewers systems, waterways or otherwise impacting plant and animal species.

Persistence and degradability – No data available.

Bioaccumulative potential – No data available.

Mobility in Soil – No data available.

Other adverse effects (GHG, Ozone) - No data available.

13. DISPOSAL CONSIDERATIONS
This product could be classified as a hazardous waste due to ignitability. Dispose in accordance with Federal, State, and Local regulations. Prevent materials from entering drains, sewers, or waterways. Do not dump on the ground. Do not burn.

14. TRANSPORT INFORMATION
In accordance with DOT - Not regulated for transport.

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: Immediate Health; Delayed Health; Fire Hazard

Section 313 Reportable Ingredients: None.


16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Rating</th>
<th>NFPA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health - 1</td>
<td>Health - 1</td>
</tr>
<tr>
<td>Flammability - 0</td>
<td>Flammability - 0</td>
</tr>
<tr>
<td>Reactivity - 0</td>
<td>Reactivity - 0</td>
</tr>
</tbody>
</table>

Preparation Date: April 2015
Revision Date: February 2017
Revisions: Corrected typo in Section 3
Changed OSHA TWA for crystalline silica quartz in Section 8
Updated California Proposition 65 warning language in Section 15

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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.