1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: LATICRETE® 220 Marble & Granite Thick Bed Adhesive (Grey / White)
Recommended use: Cement-based, Tile & Stone Adhesive (For professional use).
Company Name: LATICRETE MIDDLE EAST LLC
Address: P.O. Box. 86028, Ras Al Khaimah, United Arab Emirates
Telephone: +971 7 244 6396

2. HAZARD(s) IDENTIFICATION

Classification:
- Skin Corr. /Irritation: Category 2
- Eye Dam./Irritation: Category 1
- Sensitization, skin: Category 1
- Carcinogenicity: Category 1A
- Specific target organ toxicity, single exposure: Category 3 respiratory tract irritation

Label Element:

Signal Words: Corrosive, Harmful, Health Hazard
Hazard Statement(s):
- H318 Causes serious eye damage.
- H315 Causes skin irritation.
- H335 May cause respiratory irritation.
- H372 Causes damage to organs (Lung) through prolonged or repeated exposure (inhalation)

Precautionary Statement(s):
Prevention:
- P280 Wear protective gloves and eye/face protection.
- P271 Use only outdoors or in a well-ventilated area.
- P260 Do not breathe dust/gas/mist/ vapours.
- P270 Do not eat, drink or smoke when using this product.
- P264 Wash with plenty of water and soap thoroughly after handling.

Response:
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
- P362 + P364 Take off contaminated clothing and wash before reuse.

Storage:
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

Disposal:
- P501 Dispose of contents/container to hazardous or special waste collection point.

Other hazards which do not result in classification: None known.
Supplemental information:
- In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.

Emergency overview:
- IRRITANT. Irritating to eyes, respiratory system and skin.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No</th>
<th>Content (% by wt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary Portland Cement</td>
<td>65997-15-1</td>
<td>&gt;25</td>
</tr>
<tr>
<td>EVA Co Polymer</td>
<td>24937-78-8</td>
<td>&gt;0.5</td>
</tr>
<tr>
<td>Silica Sand</td>
<td>14808-60-7</td>
<td>&gt;45</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

Skin contact
Take off immediately all contaminated clothing. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse. Get medical attention immediately.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion
Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if any discomfort continues.

Personal protection for first-aid responders
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Symptoms caused by exposure
Rash. Corrosive effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Medical attention and special treatment
Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

5. FIRE-FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
Hazardous during fire-fighting: carbon monoxide, carbon dioxide, harmful vapours.

Special protective equipment and precautions for fire fighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/instructions
Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. The degree of risk is governed by the burning substance and the fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

General fire hazards
No unusual fire or explosion hazards noted.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders

Wearing appropriate protective clothing.

Environmental precautions

Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Environmental manager must be informed of all major releases.

Methods and materials for containment and cleaning up

Large Spills: Pick up with suitable appliance and dispose of. Pack in tightly closed containers for disposal. Small Spills: Pick up with suitable appliance and dispose off.

Other issues relating to spills and releases

Never return spills in original containers for re-use. For waste disposal, see Section 13 of the SDS. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid dust formation. The Cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Avoid inhalation of dusts. Avoid skin contact. Pour downwind and allow as little free fall as possible while emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust ventilation. Segregate from metals. Segregate from acids. Segregate from lyes. Segregate from oxidants. Segregate from foods and animal feeds.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: High density polyethylene (HDPE). Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Follow standard monitoring procedures.

Occupational exposure limits

Portland Cement: PEL 15 mg/m³ Respirable fraction; PEL 5 mg/m³ Silica Sand: OSHA PEL TWA value 2.4 millions of particles per cubic foot of air Respirable; The exposure limit is calculated from the equation, 250/(%SiO₂+5), using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits. TWA value 0.1 mg/m³ Respirable; The exposure limit is calculated from the equation, 10/(%SiO₂+2), using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits. TWA value 0.3 mg/m³ Total dust; The exposure limit is calculated from the equation, 30/(%SiO₂+2), using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits. EVA Co-Polymer: OEL (USA) Ceiling limit: 5 mg/m³

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.
Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection
Wear safety glasses with side shields (or goggles), Face-shield. Wear a full-face respirator, if needed

Skin protection Hand protection
Wear appropriate chemical resistant gloves.

Others
Body protection must be chosen based on level of activity and exposure.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment

Hygiene measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Powder
Colour Grey / White
Odour Odorless
pH Not applicable
Melting point/ freezing point Not available
Initial boiling point and boiling range Not available
Flash point Not flammable
Evaporation rate Not applicable
Flammability (solid, gas) Not applicable
Vapor pressure Not applicable
Relative density 1.65
Solubility (water) Insoluble
Auto-ignition temperature Not available

10. STABILITY AND REACTIVITY

Reactivity No hazardous reactions if stored and handled as prescribed/indicated
Chemical stability Material is stable under normal conditions
Possibility of hazardous reactions The product is stable if stored and handled as prescribed/indicated. Strong bases are formed on the addition of water.
Conditions to avoid Avoid dust formation. Avoid humidity
Incompatible materials Strong Bases. Strong acids.
Hazardous decomposition products No hazardous decomposition products if stored and handled as prescribed/indicated
11. TOXICOLOGICAL INFORMATION

Information on possible routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute toxicity/ Effects

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. The statement has been derived from the properties of the individual components.

Oral
Swallowing may cause gastrointestinal irritation

Inhalation
Dust irritates the respiratory system, and may cause coughing and difficulties in breathing

Dermal
Causes skin irritation. May cause an allergic skin reaction. Prolonged contact with wet cement/mixture may cause burns.

Eye
Causes serious eye damage. Prolonged contact with wet cement/mixture may cause burns

Sensitization
Assessment of sensitization: Causes skin irritation.

Chronic Toxicity /Effects

Assessment of carcinogenicity: May cause cancer. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibers, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)

Carcinogenicity

Repeated dose toxicity
Prolonged or repeated inhalation of respirable crystalline silica may result in silicosis.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Aspiration hazard
Due to the physical form of the product it is not an aspiration hazard.

Other Information
Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

12. ECOLOGICAL INFORMATION

Aquatic-toxicity
Not expected to be harmful to aquatic organisms

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available for this product

Mobility in soil
The product is not mobile in soil.

Additional information
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this comp
13. DISPOSAL CONSIDERATIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal methods</td>
<td>Observe national and local legal requirements. Residues should be disposed of in the same manner as the substance/product.</td>
</tr>
<tr>
<td>Residual waste</td>
<td>Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).</td>
</tr>
<tr>
<td>Contaminated packaging</td>
<td>Completely emptied packaging can be given for recycling.</td>
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14. TRANSPORT INFORMATION

<table>
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<th>Details</th>
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<tr>
<td>ADG</td>
<td>Not classified as a dangerous good under transport regulations</td>
</tr>
<tr>
<td>IMDG</td>
<td>Not classified as a dangerous good under transport regulations</td>
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<tr>
<td>IATA/ICAO</td>
<td>Not classified as a dangerous good under transport regulations</td>
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15. REGULATORY INFORMATION

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<th>Description</th>
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<tr>
<td>Safety, health and environmental regulations</td>
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<tr>
<td>National regulations</td>
<td>This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.</td>
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<tr>
<td>International regulations</td>
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16. OTHER INFORMATION

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<tr>
<td>Issue date</td>
<td>31-January-2019</td>
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