1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**
Product Name: Tile Paste Adhesive/Tile Adhesive

**Other Means of Identification**
SDS #: RD-0031GHS

**Product Code**
0497, 0498 Series

**Recommended Use of the Chemical and Restrictions on Use**
Recommended Use: Aqueous White Tile Adhesive.

**Details of the Supplier of the Safety Data Sheet**
Supplier Address:
Red Devil, Inc.
4175 Webb Street
Pryor, Oklahoma 74361
www.reddevil.com

**Emergency Telephone Number**
Company Phone Number: 918-825-5744
Fax: 918-825-5761
Emergency Telephone:
INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

**Classification**
This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Appearance** White paste  
**Physical State** Smooth paste  
**Odor** Mild
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td>1317-65-3</td>
<td>&lt;60</td>
</tr>
<tr>
<td>Aqueous Emulsion</td>
<td>MIXTURE</td>
<td>&lt;25</td>
</tr>
<tr>
<td>Benzoate Ester</td>
<td>Proprietary</td>
<td>&lt;7</td>
</tr>
<tr>
<td>Non-hazardous Ingredients*</td>
<td>Proprietary</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Ammonium Hydroxide</td>
<td>7664-41-7</td>
<td>&lt;0.25</td>
</tr>
<tr>
<td>Petroleum Hydrocarbon</td>
<td>64742-48-9</td>
<td>&lt;0.75</td>
</tr>
</tbody>
</table>

*Unlisted ingredients are not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). (Calcium Carbonate, Titanium Dioxide) Inhalation of particulates unlikely due to product’s physical state.

4. FIRST AID MEASURES

First Aid Measures

General Advice
Provide this SDS to medical personnel for treatment.

Inhalation
Remove to fresh air. If breathing difficult, leave area to obtain fresh air. If breathing remains difficult, get medical attention.

Eye Contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek immediate medical attention/advice.

Ingestion
Do not induce vomiting, unless directed by medical personnel. Get immediate medical attention.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If irritation persists, seek medical attention.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms
Prolonged or repeated skin contact may result in dermatitis (red, dry skin). Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness and discomfort. Irritating to mouth, throat, and stomach if ingested. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Overexposure to vapors during application and curing may mildly irritate respiratory tract and result in coughing and sneezing.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians
Provide general supportive measures and treat symptomatically. May aggravate pre-existing skin disorders.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Carbon dioxide (CO2). Dry chemical. Water spray (fog). Foam.

Unsuitable Extinguishing Media
Not determined.

Specific Hazards Arising from the Chemical
Product is combustible & may ignite if exposed to high temperature or direct flame.
Hazardous Combustion Products
Carbon, titanium & iron oxides, depending upon formulation.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions
Observe all personal protection equipment recommendations described in Sections 5 & 8.

For Emergency Responders
Restrict access to spill area.

Environmental Precautions
Minimize use of water to prevent environmental contamination. Prevent spill or rinse from contaminating storm drains, sewers, soil or groundwater.

Methods and Material for Containment and Cleaning Up

Methods for Containment
Prevent further leakage or spillage if safe to do so. Use absorbent material to contain spill.

Methods for Cleaning Up
Sweep up absorbed material and shovel into suitable containers for disposal. Wash area with soap and water. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling
Avoid breathing vapors. Use only with adequate ventilation. Open windows & doors to ensure fresh air cross-ventilation during application and curing. Wash thoroughly with soap and water after handling. Avoid contact with skin, eyes or clothing. While handling product keep out of reach of childrens and pets.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions
Close container after each use. Store containers away from excessive heat & freezing. Do not store @ temperatures above 120 ° F. Protect from freezing. To maximize shelf life, store @ temperatures below 26C (80F).

Incompatible Materials
Oxidizers. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
Exposure guidelines / protective equipment are for routine handling and accidental spills

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td></td>
<td>TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable</td>
<td>TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>fraction (vacated) TWA: 15 mg/m³ total dust</td>
<td>fraction (vacated) TWA: 10 mg/m³ total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 5 mg/m³ respirable fraction</td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>TWA: 10</td>
<td>TWA: 15 mg/m³ total dust TWA: 10 mg/m³ total dust</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
<tr>
<td></td>
<td>mg/m³</td>
<td>(vacated) TWA: 5 mg/m³ total dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Ammonium Hydroxide
7664-41-7

<table>
<thead>
<tr>
<th>STEL: 35 ppm</th>
<th>TWA: 25 ppm</th>
<th>TWA: 35 mg/m³</th>
<th>(vacated) STEL: 35 ppm</th>
<th>(vacated) STEL: 27 mg/m³</th>
<th>IDLH: 300 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA: 25 ppm</td>
<td>TWA: 25 ppm</td>
<td>TWA: 25 ppm</td>
<td>TWA: 25 ppm</td>
<td>TWA: 18 mg/m³</td>
<td>STEL: 35 ppm</td>
</tr>
<tr>
<td>TWA: 35 mg/m³</td>
<td>TWA: 35 mg/m³</td>
<td>TWA: 35 ppm</td>
<td>TWA: 35 mg/m³</td>
<td>STEL: 27 mg/m³</td>
<td>STEL: 35 ppm</td>
</tr>
</tbody>
</table>

**Appropriate Engineering Controls**

**Engineering Controls**
Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

**Individual Protection Measures, such as Personal Protective Equipment**

**Eye/Face Protection**
Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations & standards.

**Skin and Body Protection**
Skin: Wear chemical impervious gloves (eg: Nitrile or Neoprene). Use triple gloves for spill response. If necessary, refer to appropriate regulations & standards.

Body: Use protection appropriate for task (eg: lab coat, coveralls, Tyvek suit). If necessary, refer to OSHA Technical Manual (Sec. VII: Personal Protective Equipment) or appropriate Standards of Canada. Use foot protection, as described in appropriate regulations & standards.

**Respiratory Protection**
If mists or sprays are created, use appropriate respiratory protection. Oxygen levels below 19.5% considered IDLH by OSHA. In such instances, use full-facepiece pressure demand SCBA or a full facepiece, supplied air respirator w/ auxiliary self-contained air supply.

**General Hygiene Considerations**
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on Basic Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks · Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.0-10.0</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>&lt; 0 °C / &lt;32 °F</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>~98.88-104.44 °C / ~210-220 °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 93.33 °C / &gt; 200 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Heavier than air</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>~1.50-1.70</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble in water</td>
<td></td>
</tr>
<tr>
<td>Solubility in Other Solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>&lt;1.5%</td>
<td></td>
</tr>
<tr>
<td>VOC Content</td>
<td>&lt; 25 g/L</td>
<td></td>
</tr>
</tbody>
</table>

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10. STABILITY AND REACTIVITY

Reactivity
Cures upon contact with air.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to Avoid
Incompatible Materials. Excessive heat or cold.

Incompatible Materials
Oxidizers. Strong acids.

Hazardous Decomposition Products
Thermal decomposition can generate irritating dust, fumes and toxic gases (carbon, titanium, and iron oxides, depending upon formulation).

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation
Mildly irritating to respiratory tract.

Eye Contact
May cause temporary irritation on eye contact.

Skin Contact
Prolonged and frequent contact may cause redness and irritation. Repeated skin contact may cause dermatitis.

Ingestion
May cause gastrointestinal irritation, nausea, diarrhea, and vomiting.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide 13463-67-7</td>
<td>&gt; 10000 mg/kg ( Rat )</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ammonium Hydroxide 7664-41-7</td>
<td>= 350 mg/kg ( Rat )</td>
<td>-</td>
<td>= 5.1 mg/L ( Rat ) 1 h = 2000 ppm ( Rat ) 4 h</td>
</tr>
<tr>
<td>Petroleum Hydrocarbon 64742-48-9</td>
<td>&gt; 5000 mg/kg ( Rat )</td>
<td>&gt; 3160 mg/kg ( Rabbit )</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on Physical, Chemical and Toxicological Effects

Symptoms
Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Sensitization
Not known to be human skin or respiratory sensitizers.
Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. Titanium dioxide is a possible carcinogen when it appears as a respirable dust. Trace residual Formaldehyde present in base emulsion viewed as possible cancer hazard.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td></td>
<td>Group 2B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13463-67-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans

Numerical Measures of Toxicity
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity
PRACTICES SHOULD BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.
Product not tested for aquatic or animal toxicity. Release of product to terrestrial, atmospheric & aquatic environments should be avoided.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide</td>
<td></td>
<td>0.44: 96 h Cyprinus carpio mg/L LC50 0.26 - 4.6: 96 h Lepomis macrochirus mg/L LC50 1.17: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.73 - 2.35: 96 h Pimephales promelas mg/L LC50 5.9: 96 h Pimephales promelas mg/L LC50 static 1.5: 96 h Poecilia reticulata mg/L LC50 1.9: 96 h Poecilia reticulata mg/L LC50 static 25.4: 48 h Daphnia magna mg/L LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7664-41-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petroleum Hydrocarbon</td>
<td>2200: 96 h Pimephales promelas mg/L LC50</td>
<td>2.6: 96 h Chaetogammarus marinus mg/L LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-48-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence and Degradability
Not tested for persistence & biodegradability

Bioaccumulation
Not tested for bio-accumulation potential

Mobility
Not tested for mobility in soil

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide</td>
<td>-1.14</td>
</tr>
<tr>
<td>7664-41-7</td>
<td></td>
</tr>
</tbody>
</table>

Other Adverse Effects
Environmental Exposure Controls: Should be maintained so as to prevent release to the environment (atmospheric release, release to waterways & spills)

Ozone
Not expected to produce any ozone depletion

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
**14. TRANSPORT INFORMATION**

**Note**
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**
Not regulated

**IATA**
Not regulated

**IMDG**
Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**
Not Determined

**TSCA**
Listed

**DSL**
Listed

**NDSL**
Listed

**Legend:**
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**US Federal Regulations**

**SARA 313**
Not determined

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide - 7664-41-7</td>
<td>7664-41-7</td>
<td>&lt;0.25</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Acute health hazard**
Yes

**Chronic Health Hazard**
No

**Fire hazard**
No

**Sudden release of pressure hazard**
No

**Reactive Hazard**
No

**CWA - Reportable Quantities**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide</td>
<td>100 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

---

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<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide</td>
<td>100 lb</td>
<td>100 lb</td>
<td>RQ 100 lb final RQ</td>
</tr>
<tr>
<td>7664-41-7</td>
<td></td>
<td></td>
<td>RQ 45.4 kg final RQ</td>
</tr>
</tbody>
</table>

**US State Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide - 13463-67-7</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

**U.S. State Right-to-Know Regulations**

Not Determined

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate - 1317-65-3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Titanium dioxide - 13463-67-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ammonium Hydroxide - 7664-41-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Issue Date** 24-Jan-2013  
**Revision Date** 01-Oct-2017  
**Revision Note** New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet