1. PRODUCT AND COMPANY IDENTIFICATION

Product name: OSI SF 450 Latex Subfloor Adhesive
Product type: Water based adhesive
Restriction of Use: None identified
Company address: Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

IDH number: 1911051
Region: United States

Contact information:
Telephone: (860) 571-5100
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: ABRASION COULD RELEASE RESPIRABLE PARTICLES OF SILICA QUARTZ, A CANCER HAZARD BY INHALATION. NORMAL USE OF THIS PRODUCT CAUSES NO SUCH RELEASE.

FLAMMABLE LIQUID AND VAPOR. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS   HAZARD CATEGORY
FLAMMABLE LIQUID   3
EYE IRRITATION   2A
SKIN SENSITIZATION   1

PICTOGRAM(S)

Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.

Response: If on skin (or hair): Take off immediately all contaminated clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Wash contaminated clothing before reuse. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>CAS Number</th>
<th>Percentage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours.

**Skin contact:** Wash affected area immediately with soap and water.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. If symptoms develop and persist, get medical attention.

**Ingestion:** Consult a physician if necessary.

**Symptoms:** See Section 11.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Carbon dioxide, foam, powder Water fog.

**Special firefighting procedures:** Use water spray to keep fire exposed containers cool and disperse vapors. Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Unusual fire or explosion hazards:** Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

**Hazardous combustion products:** Oxides of carbon. Oxides of nitrogen.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental precautions:** Not available.

**Clean-up methods:** Absorb spill with inert material. Shovel material into appropriate container for disposal. Remove all sources of ignition.
7. HANDLING AND STORAGE

Handling: Avoid prolonged or repeated skin contact with this material. Keep away from sources of ignition - no smoking. Keep out of the reach of children.

Storage: For safe storage, store at or above 0 °C (32°F) Keep from freezing. Store in a cool, dry area. Keep containers closed when not in use.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>10 mg/m3 TWA Total dust.</td>
<td>5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Acetone</td>
<td>750 ppm STEL 500 ppm TWA</td>
<td>1,000 ppm (2,400 mg/m3) PEL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Kaolin</td>
<td>2 mg/m3 TWA Respirable fraction.</td>
<td>15 mg/m3 PEL Total dust. 5 mg/m3 PEL Respirable fraction.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Urea</td>
<td>None</td>
<td>None</td>
<td>10 mg/m3 TWA Total particulate.</td>
<td>None</td>
</tr>
<tr>
<td>Ethanol</td>
<td>1,000 ppm STEL</td>
<td>1,000 ppm (1,900 mg/m3) PEL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>0.025 mg/m3 TWA Respirable fraction.</td>
<td>2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Engineering controls: Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields.

Skin protection: Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste
Color: Off white
Odor: Acrylic
Odor threshold: Not available.
ph: 7 - 9
Vapor pressure: Not available.
Boiling point/range: 100 °C (212°F)
Melting point/ range: Not available.
Specific gravity: 1.335
Vapor density: Not available.
Flash point: 40 °C (104°F)
Flammable/Explosive limits - lower: Not available.
Flammable/Explosive limits - upper: Not available.
Autoignition temperature: Not available.
Evaporation rate: Not available.
Solubility in water: Not available.
Partition coefficient (n-octanol/water): Not available.
VOC content: 1.5 %; 50 g/l (by weight, calculated using CARB method; g/L less water, less exempts calculated using SCAQMD method)
Viscosity: 200,000 cp
Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.
Hazardous reactions: Will not occur.
Incompatible materials: None known
Reactivity: Not available.
Conditions to avoid: Heat. Do not freeze.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Inhalation, Skin contact, Eye contact
Potential Health Effects/Symptoms

**Inhalation:** May cause irritation to nose and throat. Inhalation of high vapor concentrations may produce respiratory irritation, and may cause central nervous system (CNS) depression. Abrasion of cured material such as by sanding or grinding could release respirable particles of silica quartz, a cancer hazard by inhalation. Normal use of this product causes no such release.

**Skin contact:** May cause moderate skin irritation.

**Eye contact:** Not expected to be harmful by ingestion. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>LD50s and LC50s</th>
<th>Immediate and Delayed Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>None</td>
<td>Nuisance dust</td>
</tr>
<tr>
<td>Acetone</td>
<td>Oral LD50 (RABBIT) = 5,340 mg/kg, Oral LD50 (RAT) = 5,800 mg/kg, Oral LD50 (RAT) = 9,800 mg/kg, Dermal LD50 (RABBIT) = 20,000 mg/kg, Inhalation LC50 (RAT, 8 h) = 50.1 mg/l, Inhalation LC50 (RAT, 4 h) = 76 mg/l</td>
<td>Blood, Central nervous system, Irritant, Reproductive</td>
</tr>
<tr>
<td>Kaolin</td>
<td>Oral LD50 (RAT) = &gt; 5,000 mg/kg, Dermal LD50 (RAT) = &gt; 5,000 mg/kg</td>
<td>Nuisance dust</td>
</tr>
<tr>
<td>Urea</td>
<td>Oral LD50 (RAT) = 8,471 mg/kg</td>
<td>Central nervous system, Irritant, Metabolic</td>
</tr>
<tr>
<td>Ethanol</td>
<td>Oral LD50 (RAT) = 9.9 g/kg, Oral LD50 (RAT) = 6.2 g/kg, Oral LD50 (RAT) = 17.8 g/kg, Oral LD50 (RAT) = 11.5 g/kg, Oral LD50 (RAT) = 10.6 g/kg, Oral LD50 (RAT) = 7,060 mg/kg, Inhalation LC50 (RAT, 10 h) = 20,000 ppm</td>
<td>Central nervous system, Irritant</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>None</td>
<td>Immune system, Lung, Some evidence of carcinogenicity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Acetone</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Kaolin</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Urea</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Ethanol</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>Known To Be Human Carcinogen.</td>
<td>Group 1</td>
<td>No</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

IDH number: 1911051
Product name: OSI SF 450 Latex Subfloor Adhesive
13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)
- Proper shipping name: Adhesives
- Hazard class or division: 3
- Identification number: UN 1133
- Packing group: III

International Air Transportation (ICAO/IATA)
- Proper shipping name: Adhesives
- Hazard class or division: 3
- Identification number: UN 1133
- Packing group: III

Water Transportation (IMO/IMDG)
- Proper shipping name: ADHESIVES
- Hazard class or division: 3
- Identification number: UN 1133
- Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information
- TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
- TSCA 12 (b) Export Notification: None above reporting de minimis
- CERCLA/SARA Section 302 EHS: None above reporting de minimis
- CERCLA/SARA Section 311/312: Fire, Immediate Health, Delayed Health
- CERCLA/SARA Section 313: None above reporting de minimis
- California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information
- CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.
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