## SECTION I - MATERIAL IDENTIFICATION AND USE

**Commercial Floor Care System - Floor Stripper (S-490)**

### CHEMICAL Name
- Not Applicable

### CHEMICAL FAMILY
- Water-dispersed alkaline floor stripper

### CHEMICAL FORMULA
- Not Applicable

### TRADE NAME AND SYNONYMS
- S-490

### MOLECULAR WEIGHT
- Not Applicable

### MATERIAL USE
- Permanent interior installation of wall paneling and construction adhesive.

### HMIS Hazard Index

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3*</td>
<td>1</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

### WHMIS Classification:
- * Refer to 'Effects of Chronic Exposure to Material' section

## SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENTS</th>
<th>%</th>
<th>C.A.S. NUMBERS</th>
<th>LD50 (SPECIES &amp; ROUTE)</th>
<th>LC50 (SPECIES &amp; ROUTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxy-ethanol</td>
<td>8</td>
<td>111-76-2</td>
<td>(orl-rat) 470 mg/kg</td>
<td>(ihl-rat) 450 ppm/4H</td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>8</td>
<td>6834-92-0</td>
<td>(orl-rat) 1153 mg/kg</td>
<td>Not Available</td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>8</td>
<td>141-43-5</td>
<td>(orl-rat) 1720 mg/kg</td>
<td>(ihl-mus) &gt;2420 mg/m³/2H</td>
</tr>
</tbody>
</table>

## SECTION III - PHYSICAL DATA FOR MATERIAL

### PHYSICAL STATE
- Liquid

### ODOR AND APPEARANCE
- Very pale yellow, slightly hazy

### ODOR THRESHOLD (PPM)
- Not Available

### SPECIFIC GRAVITY
- (H₂O=1): 1.05

### VAPOR PRESSURE
- Not known

### VAPOR DENSITY
- Not known

### EVAPORATION RATE
- Not known

### BOILING POINT
- Not known

### FREEZING POINT
- Not known

### SOLUBILITY IN WATER
- Completely soluble

### % VOLATILE (BY WEIGHT)
- 90%

### pH
- 12.5
SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY
LOW HAZARD. Product is not normally combustible.

MEANS OF EXTINCTION
Not combustible. If involved in a fire, use whatever methods appropriate to type of fire and surrounding material.

SPECIAL PROCEDURES
For general fire fighting, protect fire fighters from toxic products of combustion by wearing self-contained breathing apparatus. Closed containers in a fire may rupture due to pressure build-up; use water to cool containers.

<table>
<thead>
<tr>
<th>FLASHPONTD AND METHOD</th>
<th>UPPER EXPLOSION LIMIT (% BY VOLUME)</th>
<th>LOWER EXPLOSION LIMIT (% BY VOLUME)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;110°C (230°F)</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

(Asetaflash Closed Tester ASTM D3828-81)

<table>
<thead>
<tr>
<th>AUTOIGNITION TEMPERATURE</th>
<th>HAZARDOUS COMBUSTION PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Available</td>
<td>Not known. Expected to contain oxides of carbon, nitrogen, and smoke.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENSITIVITY TO MECHANICAL IMPACT</th>
<th>SENSITIVITY TO STATIC DISCHARGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not normally sensitive</td>
<td>Not normally sensitive</td>
</tr>
</tbody>
</table>

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY
Stable under ambient temperature and pressure.

INCOMPATIBILITY TO OTHER SUBSTANCES
Strong oxidizing agents, water-reactive chemicals such as sodium, acids.

REACTIVITY AND UNDER WHAT CONDITIONS
Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS
Oxides of carbon, nitrogen, smoke and other potentially toxic vapors and gases that are common to thermal degradation of organic compounds.

SECTION VI - TOXICOLOGICAL PROPERTIES OF MATERIAL

ROUTE OF ENTRY
Ingestion and direct skin/eye contact.

EFFECTS OF ACUTE EXPOSURE TO MATERIAL
Inhalation: Normal end-product use does not present an inhalation hazard. If misted or sprayed, may cause significant irritation of respiratory tract.

Skin and eyes: Corrosive material. Causes skin and eye burns, with pain, redness, death of tissue and possible scarring.

Ingestion: Harmful if swallowed.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL
Prolonged or repeated skin contact may cause irritation and inflammation. Refer to 'Carcinogenicity, Reproductive toxicity' section for further information.
<table>
<thead>
<tr>
<th>MATERIAL NAME/IDENTIFIER</th>
<th>Commercial Floor Care System - Floor Stripper (S-490)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 OF MATERIAL (SPECIES &amp; ROUTE)</td>
<td>LC50 OF MATERIAL (SPECIES &amp; ROUTE)</td>
</tr>
<tr>
<td>Not available for product - See Section II</td>
<td>Not available for product - See Section II</td>
</tr>
<tr>
<td>EXPOSURE (LIMITS)</td>
<td>IRRITANCY OF MATERIAL</td>
</tr>
<tr>
<td>2-Butoxy-ethanol = 20 ppm (Skin)</td>
<td>2-Butoxy-ethanol = (skn-rbt)500 mg (open) MLD</td>
</tr>
<tr>
<td>Monoethanolamine = 3 ppm</td>
<td>Monoethanolamine = (skn-rbt)505 mg, (open) MOD;</td>
</tr>
<tr>
<td>(all are ACGIH - TLV-TWA)</td>
<td>Monoethanolamine = (eye-rbt)763 µg, SEV</td>
</tr>
<tr>
<td>Sodium metasilicate = (skn-hmn) 250 mg/24H, SEV</td>
<td></td>
</tr>
<tr>
<td>SENSITIZATION OF MATERIAL</td>
<td>SYNERGISTIC MATERIALS</td>
</tr>
<tr>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity: No ingredient rated as a carcinogen by IARC or ACGIH.</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity, teratogenicity, mutagenicity: 2-Butoxy-ethanol is an experimental teratogen, with other reported reproductive effects.</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION VII - PREVENTIVE MEASURES**

**PERSONAL PROTECTIVE EQUIPMENT**

Respiratory Protection: Should not be required for normal conditions of use.

Skin and Eye Protection: Avoid contact with eyes and prolonged contact with skin. Spectacle-type glasses with sideshields or chemical splash goggles and latex or rubber gloves are recommended. Contaminated clothing should be immediately removed and not reworn until laundered. While bending, do not kneel in product or solution of product.

**ENGINEERING CONTROLS (E.G. VENTILATION, ENCLOSED PROCESS)**

Normal ambient air circulation or ventilation is adequate.

**LEAK AND SPILL PROCEDURE**

Wear eye protection and rubber or latex gloves to avoid eye or skin contact. Soak up material with absorbent materials. Rinse area with clean, cold water, then dry.

**WASTE DISPOSAL**

Use only approved disposal methods in accordance with all federal, provincial, and local waste disposal regulations. Transfer absorbent and remains of spill to a corrosive-resistant container, close and label. Do not flush unused contents or residue down drains. Consult with local municipal officials, or provincial Ministry of the Environment office nearest to your location, for approved disposal methods.

**HANDLING PROCEDURES AND EQUIPMENT**

Avoid eye and prolonged skin contact with the product after dilution. Use with adequate ventilation. Use precautions that are common with the safe handling of corrosives. Close container after use. Good hygienic practices should be observed. Wash thoroughly with soap and water before eating, drinking, smoking, or using toilet facilities. Launder contaminated clothing before reuse. Do not take internally. Use only as directed on label. Keep out of the reach of children.

**STORAGE REQUIREMENTS**

Store in an area suitable for corrosive materials, away from incompatibles. Keep from freezing.

**SPECIAL SHIPPING INFORMATION**

Ensure that all containers have appropriate lids and are securely closed. Transportation of Dangerous Goods (TDG) Act classification: Corrosive liquid, n.o.s. (Monoethanolamine), Class 8(9.2), UN1760, Packing Group III.
SECTION VIII - FIRST AID MEASURES

Inhalation: None normally required. If breathing problems arise, remove to fresh air. Seek medical attention if symptoms persist.

Skin and Eyes: Flush eyes with plenty of water for at least 15 minutes. If wearing contact lenses, remove them immediately and continue flushing. Get immediate medical attention. For skin contact, flush well with water. If spilled on clothing, remove and launder before wearing the clothing again. Refer to physician if burns occur, or if irritation or other symptoms persist.

Ingestion: Do not induce vomiting. Immediately call Poison Control Center or physician for guidance. Never give anything by mouth if patient is unconscious. Obtain medical attention immediately.

ADDITIONAL INFORMATION

The information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. Armstrong World Industries Canada Ltd., will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This Material Safety Data Sheet is valid for three (3) years.

SECTION IX - PREPARATION DATE OF M.S.D.S.

PREPARED BY: Environment, Health and Safety
TELEPHONE NUMBER 1-877-276-7876, Opt 2,3,3
DATE June 1, 2009

ADDITIONAL NOTES OR REFERENCES:

Abbreviations:
- ACGIH = American Conference of Governmental Industrial Hygienists
- ASTM = American Society for Testing and Materials
- CNS = Central Nervous System
- CPR = Controlled Product Regulations, Hazardous Product Act
- IARC = International Agency for Research on Cancer
- MSHA = Mine Safety and Health Administration
- NIOSH = National Institute of Safety and Health
- TLV = Threshold Limit Values
- TWA = Time Weighted Average

References:
1. Material Safety Data Sheets from raw materials' suppliers
2. ACGIH, Threshold Limit Values and Biological Exposure Indices for 1999