SAFETY DATA SHEET
(according to (EC) 1907/2006)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Emulsion A

1.2. Relevant identified uses of the substance or mixture and uses advised against
Polish additive

1.3. Details of the supplier of the safety data sheet
Vertellus LLC
201 North Illinois Street, Suite 1800,
Indianapolis, IN 46204
336-292-1781
e-mail Address: msds@vertellus.com

1.4. Emergency telephone number
Vertellus: 1-336-292-1781
CHEMTREC (USA): 1-800-424-9300 (collect calls accepted); (Int'l): 1-703-527-3887 (collect calls accepted; 011 prefix not needed)

SECTION 2: Hazards identification

<table>
<thead>
<tr>
<th>HMIS Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH 1</td>
</tr>
<tr>
<td>FLAMMABILITY 1</td>
</tr>
<tr>
<td>REACTIVITY 0</td>
</tr>
</tbody>
</table>

2.1. Classification of the substance or mixture
(According to Regulation (EC) No 1272/2008)
Not classified as hazardous under this directive.

(According to Directive 67/548/EEC)

Symbol: Not classified as hazardous under this directive.
Risk Phrases: Not classified as hazardous under this directive.
Safety Phrases: Not classified as hazardous under this directive.

2.2. Label elements

Signal Word:
Not required.

Hazard Precautions:
Not classified as hazardous under this directive.
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Prevention Precautionary Statements:
Note: These precautionary statements are not prescribed by directive 1272/2008 as this product is not classified as hazardous under this directive. Wash hands thoroughly after handling with soap and water. Wear protective gloves, protective clothing, eye protection and face protection. If swallowed, in eyes, on skin or inhaled call a poison center or doctor/physician if you feel unwell. If inhaled, remove victim to fresh air and keep at rest in a comfortable position for breathing. Take off contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed.

First Aid Precautionary Statements:
Not required.

Storage Precautionary Statements:
Not required.

Disposal Precautionary Statements:
Not required.

2.3. Other hazards

Signs and Symptoms of Potential Overexposure:
Single exposure to inhaling vapors or mist is not likely to be hazardous. Not likely to be toxic by ingestion. Single dose oral toxicity is low. Prolonged or repeated skin contact may cause skin irritation in some individuals. Slightly irritating to eyes.

Primary Route(s) of Exposure:
Inhalation. Ingestion. Skin contact. Eye contact.

Medical Conditions Aggravated by Exposure:
Not available.

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
<th>EINECS / ELINCS</th>
<th>CLP Inventory/ Annex VI</th>
<th>EU DSD Classification (67/548/EEC)</th>
<th>EU CLP Classification (1272/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>Proprietary</td>
<td>~ 100</td>
<td>Proprietary</td>
<td>Not listed.</td>
<td>N/A Not applicable</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

NOTE: See Section 8 of this MSDS for exposure limit data for these ingredients. See Section 15 of this MSDS for trade secret information (where applicable). See Section 16 of this MSDS for the full text of the R-phrases above.

SECTION 4: First aid measures

4.1. Description of first aid measures

Skin Contact: If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes. Get medical attention if irritation develops or persists.

Eye Contact: Quickly and gently blot or brush chemical off the face. Flush the contaminated eye with lukewarm, gently flowing water for 5 minutes. GET MEDICAL ATTENTION.
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Inhalation: If symptoms are experienced remove source of contamination or move victim to fresh air and obtain medical advice.

Ingestion: If irritation or discomfort occurs, obtain medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Acute: Single exposure to inhaling vapors or mist is not likely to be hazardous. Not likely to be toxic by ingestion. Single dose oral toxicity is low. Prolonged or repeated skin contact may cause skin irritation in some individuals. Slightly irritating to eyes.

Delayed Effects: None known.

4.3. Indication of any immediate medical attention and special treatment needed

Thermal Exposure: Not applicable.

Note to Physician: No additional first aid information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media: Carbon dioxide Alcohol foam Water spray

5.2. Special hazards arising from the substance or mixture

Hazardous Products of Combustion: Irritating and/or toxic fumes may be released if this material is burned.

Potential for Dust Explosion: not available

Special Flammability Hazards: Not applicable.

5.3. Advice for firefighters

Basic Fire Fighting Guidance: Evacuate area and fight fire from a safe distance. As in any fire, wear pressure-demand self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear. Can burn in fire releasing toxic vapors.

Flammability Classification (OSHA): Combustible Liquid - Class III B

NFPA Rating

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuation Procedures: Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Special Instructions: Remove all contaminated clothing to prevent further absorption. Decontaminate affected personnel using the first aid procedures in Section 4. Leather shoes that have been saturated must be discarded.
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6.2. Environmental precautions
Prevent releases to soils, drains, sewers, and waterways.

6.3. Methods and material for containment and cleaning up
Containment Techniques and Clean-up Procedures:
Ensure clean-up measures are in compliance with OSHA (29 CFR 1910.120).

Special Reporting Requirements:
Not applicable.

6.4. Reference to other sections
Refer to section 8 for information on selecting personal protective equipment. Refer to section 13 for information on spilled product, absorbent and clean up material disposal instructions.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for Unique Hazards:
Not applicable.
Practices to Minimize Risk:
Wear appropriate protective equipment when performing maintenance on contaminated equipment. Wash hands thoroughly before eating or smoking after handling this material.

Special Handling Equipment:
Not applicable.

7.2. Conditions for safe storage, including any incompatibilities
Storage Precautions & Recommendations:
Store in a dry area Keep container closed when not in use.
Dangerous Incompatibility Reactions:
Acids, alkalies, oxidizing agents.
Incompatibilities with Materials of Construction:
none known

7.3. Specific end use(s)
If a chemical safety assessment has been completed an exposure scenario is attached as an annex to this Safety Data Sheet. Refer to this annex for the specific exposure scenario control parameters for uses identified in subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Exposure Limits (United States):
OSHA PEL: Not established
ACGIH TLV: Not established

8.2. Exposure controls
Also see the annex to this SDS (if applicable) for specific exposure scenario controls.
Personal Protective Equipment:
Wear chemical protective gloves. Wear clean protective body-covering clothing as needed to minimize contact with clothing and skin. Wear chemical safety goggles. Wear a faceshield as needed to prevent skin and eye contact.

Respirator Caution:

Ventilation:
All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be
Provided. Use process enclosures to control the level of dust in the air.

Other Engineering Controls: All appropriate engineering controls should be used to minimize exposure potential. Use exhaust ventilation to keep airborne concentrations below exposure limits.

Thermal Hazards: Not applicable.

Additive or Synergistic Effects: None known.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, State &amp; Odor (ambient temperature):</td>
<td>Bright, clear viscous liquid</td>
</tr>
<tr>
<td>Molecular Formula:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific Gravity or Density:</td>
<td>0.999</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>pH:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>32 stokes @ 25°C</td>
</tr>
<tr>
<td>Flash Point and Method:</td>
<td>420°F (216°C) COC</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>&lt; 1 (Butyl Acetate = 1)</td>
</tr>
<tr>
<td>Vapor Density (air = 1):</td>
<td>(heavier) &gt; 1</td>
</tr>
<tr>
<td>Freezing / Melting Point:</td>
<td>-15°C 5°F</td>
</tr>
<tr>
<td>Octanol / Water Coefficient:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammable Limits:</td>
<td>Not available. (UEL)</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

Not applicable.

### SECTION 10: Stability and reactivity

10.1. Reactivity

Not classified as dangerously reactive.

10.2. Chemical stability

Stable. Hazardous polymerization will not occur.

10.3. Possibility of hazardous reactions

Not expected to occur.

10.4. Conditions to avoid

Keep from contact with oxidizing materials, acids, sparks and open flame.

10.5. Incompatible materials

Acids, alkalies, oxidizing agents.

10.6. Hazardous decomposition products

Products of incomplete combustion may include CO, CO2 and dense smoke.

### SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral LD₅₀</td>
<td>Oral LD50 (rat) &gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Acute Dermal LD₅₀</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

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Acute Inhalation LC₅₀: Not available.
Skin Irritation: Prolonged or repeated contact may cause irritation.
Skin Sensitization: No data available.
Eye Irritation: May cause slight irritation.
Target Organs: No data available.
Carcinogenicity: Not available.
Teratogenicity: Not available.
Reproduction: Not available.
Neurotoxicity: No data available.
Mutagenicity: Not available.
Additional Toxicity Information: Toxicological data are for a component of the mixture.

SECTION 12: Ecological information

12.1. Toxicity Not available.
12.2. Persistence and degradability No data
12.3. Bioaccumulative potential No data
12.4. Mobility in soil No data
12.5. Results of PBT and vPvB assessment Not available.
12.6. Other adverse effects Not available.

German Water Hazard Classification: Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number: Not applicable
Waste Classification: (per US regulations) Do NOT dump into any sewers, on the ground or into any body of water.
NOTE: Generator is responsible for proper waste characterization. State (USA) hazardous waste regulations may differ substantially from federal (USA) regulations.
Waste Disposal: Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.
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SECTION 14: Transport information

14.1. UN number
Not applicable

14.2. UN proper shipping name
Chemicals, n.o.s. (Emulsion A)

14.3. Transport hazard class(es)
Not applicable

14.4. Packing group
Not applicable

14.5. Environmental hazards
Not applicable

14.6. Special precautions for user
Not available.

NA Emergency Guidebook Numbers: Not applicable
IMDG EMS: Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

OSHA Hazards: Health: Not applicable. Physical: Not applicable.

WHMIS Classification: This product is not classified as a controlled product under Canadian Controlled Products Regulations.

Chemical Inventory Lists:

Status
TSCA: Components are listed or exempt.
EINECS: Components listed or on NLP list.
Canada(DSL/NDSL): All components are on DSL.
Japan: Not all components are listed.
Korea: All components are listed.
Australia: All components are listed.
New Zealand: All components are listed.
China: All components are listed.
Philippines: All components are listed.
Switzerland: Not all components are listed.

New Zealand GHS Classification: Not classified by this country.
Japan GHS Classification: Not classified by this country.
Korea (MOL) GHS Classification: Not classified by this country.
Australia GHS Classification: Not classified by this country.
Taiwan GHS Classification: Not classified by this country.
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Indonesia GHS Classification: Not classified by this country.

SARA 313: Not listed.

New Jersey Trade Secret Information: 54004100000-9915P

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

Full text of R phrases in Section 3: Not applicable

Legend of abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.
CAS = Chemical Abstracts Service.
DSL/NDSL = Domestic Substances List/Non-Domestic Substances List.
EC = European Community.
EEC = European Economic Community.
EINECS = European Inventory of Existing Commercial Chemical Substances.
ELINCS = European List of Notified Chemical Substances.
EU = European Union.
GHS = Globally Harmonized System.
LC = Lethal concentration.
LD = Lethal dose.
MOL = Ministry of Labor.
NEMA = National Emergency Management Agency.
NIOSH = National Institute of Occupational Safety and Health.
NTP = National Toxicological Program.
OSHA = Occupational Safety and Health Administration.
PEL = Permissible exposure limit.
RQ = Reportable quantity.
TLV = Threshold limit value.
WHMIS = Workplace Hazardous Materials Information System.

Precautionary Statement: Please note that the information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.
SAFETY DATA SHEET

Issued By: Regulatory Management Department
Revision Details: Revised in all sections to GHS format.