SAFETY DATA SHEET

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

1.1. Product identifier

VORITE* 110

Synonyms: Not applicable.

Chemical Abstracts Registry No: MIXTURE

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

Coatings

1.3. Details of the supplier of the safety data sheet

Vertellus LLC
201 North Illinois Street, Suite 1800,
Indianapolis, IN  46204
201-858-7900

e-mail Address:  sds@vertellus.com

1.4. Emergency telephone number

Vertellus: 1-201-858-7900
CHEMTREC (USA): 1-800-424-9300 (collect calls accepted)
CHEMTREC (International): 1-703-527-3887 (collect calls accepted)
NRCC (China): +86 532 83889090

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture (According to Regulation (EC) No 1272/2008)

Not classified as hazardous under this directive.

2.2. Label elements

Signal Word: Not required.

Hazard Precautions: Not classified as hazardous under this directive.

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.

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SAFETY DATA SHEET

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 (weight %)</th>
<th>EC Number</th>
<th>CLP Inventory/Annex VI</th>
<th>EU CLP Classification (1272/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VORITE® 110</td>
<td>Trade Secret Mixture</td>
<td>~ 100</td>
<td>Proprietary</td>
<td>Not listed</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

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

SECTION 4: First aid measures

4.1. Description of first aid measures

**Skin Contact:** Wash with soap and water. Get medical attention if irritation develops or persists.

**Eye Contact:** Immediately flush eyes with plenty of water. Get medical attention, if irritation persists. Rinse eyes immediately with large amounts of water for at least 15 minutes, occasionally lifting the eyelids. Get medical attention if irritation or other symptoms exist.

**Inhalation:** Remove from exposure. If not breathing, give artificial respiration and call a physician.

**Ingestion:** Do not give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Get prompt medical attention.

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.

**Delayed Effects:** None known.

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

**Note to Physician:** No specific indications. Treatment should be based on the judgment of the physician in response to the reactions of the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

**Appropriate Extinguishing Media:** Alcohol foam, carbon dioxide, dry chemical.

5.2. Special hazards arising from the substance or mixture

**Hazardous Products of Combustion:** Carbon dioxide, Carbon monoxide

**Potential for Dust Explosion:** Not applicable.
SAFETY DATA SHEET

5.3. Advice for firefighters

Basic Fire Fighting Guidance: Evacuate area and fight fire from a safe distance. Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Using water can cause frothing with increasing fire intensity.

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.

6.2. Environmental precautions

Prevent releases to soils, drains, sewers and waterways.

6.3. Methods and material for containment and cleaning up

Wear protective equipment during clean-up. Isolate spill area, preventing entry by unauthorized persons. For small spills, use suitable absorbent material and collect for later disposal. For large spills, the area may require diking to contain the spill. Contain spilled liquid with sand or vermiculite and place in a chemical waste container. Dispose of the material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable federal, state or local laws.

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. Do not eat, drink or smoke in work areas. Prevent contact with incompatible materials. Avoid spills and keep away from drains. Handle in a manner to prevent generation of aerosols, vapors or dust clouds.

Special Handling Equipment: Avoid contact with eyes and skin. Avoid breathing vapors from heated material.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Recommendations: Keep away from heat, sparks, and flame. Keep container closed when not in use.

Dangerous Incompatibility Reactions: Avoid strong acids, strong bases, and excessive heat.

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.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits: None established.
Air Monitoring Method: Not available.

8.2. Exposure controls

Also see the annex to this SDS (if applicable) for specific exposure scenario controls.

Other Engineering Controls: All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided. Whenever this product is used in a confined space or heated above ambient temperature, local mechanical ventilation use is recommended.

Personal Protective Equipment: Impervious gloves (nitrile or neoprene), chemical goggles or face shield where necessary, and where spraying/splashing is likely, a NIOSH approved air-purifying respirator with organic vapor/acid gas cartridges and particulate filter.


Thermal Hazards: Not applicable.

Environmental Exposure Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature): Yellow to amber liquid with a strong, sweet odor

Molecular Formula: Trade secret mixture
Molecular Weight: Mixture

Vapor Pressure: No data available.
Evaporation Rate: No data available.

Specifc Gravity or Density: No data available.
Vapor Density (air = 1): No data available.

Boiling Point: No data available.
Freezing / Melting Point: No data available.

Solubility in Water: Insoluble
Octanol / Water Coefficient: No data available.

pH: No data available.
Odor Threshold: No data available.

Viscosity: 115 stokes @ 77°F
Autoignition Temperature: No data available.

Flash Point and Method: 520˚F (271˚C) PMCC
Flammable Limits: No data available.

Flammability (solid, gas): Not available
Decomposition Temperature: No data available.

Explosive Properties: Not explosive.
Oxidizing Properties: Not an oxidizer.

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## SAFETY DATA SHEET

### SECTION 10: Stability and reactivity

<table>
<thead>
<tr>
<th>10.1. Reactivity</th>
<th>Not classified as dangerously reactive.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2. Chemical stability</td>
<td>Stable</td>
</tr>
<tr>
<td>10.3. Possibility of hazardous reactions</td>
<td>Not expected to occur.</td>
</tr>
<tr>
<td>10.4. Conditions to avoid</td>
<td>Avoid static discharge and uncontrolled exposure to high temperatures.</td>
</tr>
<tr>
<td>10.5. Incompatible materials</td>
<td>Avoid strong acids, strong bases, and excessive heat.</td>
</tr>
<tr>
<td>10.6. Hazardous decomposition products</td>
<td>Products of incomplete combustion may include carbon monoxide, carbon dioxide and dense smoke.</td>
</tr>
</tbody>
</table>

### SECTION 11: Toxicological information

<table>
<thead>
<tr>
<th>11.1. Information on toxicological effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral LD$_{50}$:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Acute Dermal LD$_{50}$:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Acute Inhalation LC$_{50}$:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Skin Irritation:</td>
<td>May cause mild to moderate irritation.</td>
</tr>
<tr>
<td>Eye Irritation:</td>
<td>May cause mild to moderate irritation.</td>
</tr>
<tr>
<td>Skin Sensitization:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Mutagenicity:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Reproductive / Developmental Toxicity:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Carcinogenicity:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Target Organs:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Primary Route(s) of Exposure:</td>
<td>Skin contact and absorption, eye contact, and inhalation. Ingestion is not likely to be a primary route of exposure.</td>
</tr>
<tr>
<td>Most important symptoms and effects, both acute and delayed</td>
<td>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. Delayed Effects: None known.</td>
</tr>
<tr>
<td>Additive or Synergistic effects:</td>
<td>None known.</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

SECTION 12: Ecological information

12.1. Toxicity
No data available.

12.2. Persistence and degradability
No data available

12.3. Bioaccumulative potential
No data available

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
No data available.

12.6. Other adverse effects
No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
US EPA Waste Number: Non-Hazardous
Waste Classification: The waste may be classified as "special" or hazardous per State regulations.
Waste Disposal: 
NOTE: Generator is responsible for proper waste characterization. State hazardous waste regulations may differ substantially from federal regulations. Dispose of this material responsibly, and in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws, and environmental protection duty of care principles. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate classification code according to the European Community List of Wastes should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: Transport information

The following information applies to all shipping modes (DOT/IATA/ICAO/IMDG/ADR/RID/ADN), unless otherwise indicated:

14.1. UN number Non-Hazardous
14.2. UN proper shipping name Chemicals, n.o.s. (VORITE* 110)
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 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
Chemical Inventory Lists: Status:
USA TSCA: Listed
EINECS: Listed

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Canada(DSL/NDSL): DSL
Korea: Listed
China: Listed
Taiwan: Listed
WHMIS Classification: Non-Hazardous.

Japan: Not Listed
Australia: Listed
Philippines: Not Listed
New Zealand: Not Listed

German Water Hazard Classification: WGK 1 (self-classification)
SARA 313: Not applicable.
State Regulations: Not applicable.

HMIS:

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

NFPA:

1 1 0

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.
EL/EC = European Inventory of Existing Commercial Chemical Substances.
EU = European Union.
GHS = Globally Harmonized System.
LC = Lethal Concentration.
LD = Lethal Dose.
NIOSH = National Institute of Occupational Safety and Health.
NTP = National Toxicology Program.
OSHA = Occupational Safety and Health Administration.
PEL = Permissible Exposure Limit.
RQ = Reportable Quantity.
TLV = Threshold Limit Value.
WHMIS = Workplace Hazardous Materials Information System.

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Revision Date: 04 Jun 2015
Original Date of Issue: 05 Mar 1995
Issued by: Regulatory Management Department
Email: SDS@Vertellus.com
Revision Details: Updated format

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