Section 1: Identification

Product Identifier
Product Name: N&V Expansion Liquid
Product Code: 80040, 80045

Relevant identified uses of the substance or mixture and uses advised against
Recommended use: Liquid used by dental professionals for mixing casting investments

Details of the supplier of the safety data sheet
Manufacturer/Supplier: Vacalon Company Inc
12960 Stonecreek Dr Ste C
Pickerington, OH 43147 USA
www.vacalon.com • info@vacalon.com

Telephone (General): 614-577-1945
Emergency telephone number
Hazmat Services Inc (24 hour): 800-373-7542 (USA)
484-951-2432 (International)

Section 2: Hazard Identification

Classification of the substance or mixture
• Material is not classified as a hazardous material.

Label elements
• This product is not subject to identification regulations.

Other information
• Observe normal safety regulations and precautions when handling chemicals

Section 3. Composition/Information on Ingredients

Chemical characterization
• Mixtures

Description
• Solution of colloidal silica in water

Hazardous Components
• Product contains no hazardous components in reportable quantities under current regulations.

Section 4. First-Aid Measures

Description of first-aid measures
Inhalation
• Move to fresh air. Seek medical attention if problems persist.

Skin
• Wash with water and soap. This product is not skin irritating.

Eye
• Flush eyes with water for at least 15 minutes. Seek medical attention if problems persist.

Ingestion
• Rinse out mouth with water. Never give anything by mouth to unconscious person. Seek medical attention if problems persist.

Most important symptoms and effects, both acute and delayed
• No data available

Indication of any immediate medical attention and special treatment needed
• No data available

Section 5. Firefighting Measures

Extinguishing media
Suitable extinguishing media
• The product itself will not support combustion. In a sustained fire use an extinguisher appropriate for surrounding area.

Unsuitable extinguishing media
• No data available

Special hazards arising from the substance or mixture
• No data available
Advice for firefighters

- Product itself does not burn. Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Wear protective clothing.

Environmental precautions

- Avoid run off to waterways and sewers

Methods and material for containment and cleaning up

Containment/Clean-up measures

- Clean-up with absorbent material (sand, sawdust, universal binders)
- Dispose of according to regulations

Reference to other sections

- No data available

Section 7. Handling and Storage

Precautions for safe handling

Handling

- Handle and open container with care.
- Keep container tightly closed

Information about protection against explosion and fires

- Product is not flammable
- No special measures required

Condition for safe storage, including any incompatibilities

Technical measures and storage conditions

- No special requirements

Information about common storage area

- No special requirements

Additional storage information

- Protect from freezing

Section 8. Exposure Controls/Personal Protection

Control parameters

Occupational Exposure Limit Values (valid only for aerosolized liquid or dried dust)

Aerosol of liquid

- Ceiling value of 100 mg/m³

Dried dust

- 1.6 mg/m³ as 8 hr TWA

Exposure Controls

Engineering measures/controls

- No data available

Personal Protective Equipment

- In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear safety glasses
- Wear appropriate gloves
- Lightweight protective clothing

General industrial hygiene considerations

- Wash hands before breaks and at the end of work

Environmental exposure controls

- No data available

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Appearance/Description</th>
<th>Milky white liquid</th>
<th>Odor Threshold</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Odorless</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>9 - 10 @ 20°C</td>
<td>Specific Gravity</td>
<td>1.20 - 1.29</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
<td>Boiling Point/Range</td>
<td>100°C (212°F)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Dispersible</td>
<td>Viscosity</td>
<td>&lt; 20 mPa</td>
</tr>
</tbody>
</table>
N&V Expansion Liquid

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
<th>No data available</th>
<th>Decomposition Temperature</th>
<th>No data available</th>
</tr>
</thead>
</table>

**Volatility**

<table>
<thead>
<tr>
<th>Vapor Pressure</th>
<th>20 mbr @ 20°C</th>
<th>Vapor Density</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>Explosive Properties</td>
<td>Product is not explosive</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Product is not flammable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>UEL</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
<td>LEL</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Section 10. Stability and Reactivity**

- Reactivity: No hazardous reactions known
- Chemical Stability: Stable at normal temperatures
- Possibility of hazardous reactions: No hazardous reactions known
- Conditions to avoid: No data available
- Incompatible materials: No data available
- Hazardous decomposition products: No dangerous decomposition products known

**Section 11. Toxicological Information**

- **Information on toxicological effects**
  - Likely routes of exposure: Inhalation, skin contact, eye contact and ingestion
  - **Acute/potential health effects**
    - Inhalation: Inhalation of liquid vapor or dust from dried liquid may result in irritation of the upper respiratory tract (mouth, nose, throat)
    - Skin: Skin contact may produce itching and temporary mechanical irritation
    - Eyes: Eye contact may produce temporary mechanical irritation
    - Ingestion: May cause temporary mechanical irritation of digestive tract, nausea, vomiting and diarrhea.
- Sensitizing effects: No data available
- **Acute toxicity data**
  - Sio2 solution: Oral Rat LD50: 15000 mg/kg
- **Delayed and immediate effects as well as chronic effects from short and long term exposure**: No data available
- **Carcinogenicity**: IARC, NTP or OSHA identifies no component of this product that is present at levels greater than or equal to 0.1% as a human carcinogen.

**Section 12. Ecological Information**

- Ecotoxicity: No data available
- Persistence and degradability: No data available
- Bioaccumulative potential: No data available
- Mobility in soil: No data available
- Other information: Do not discharge product unmonitored into environment

**Section 13. Disposal Considerations**

- Waste treatment methods
  - Recommendation: Dispose of in accordance with all local, state and federal regulations.
  - Contaminated packaging: Dispose of in accordance with all local, state and federal regulations.
  - Other: Waste is not hazardous as defined by RCRA (40 CFR)

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Section 14. Transport Information

Land Transport (DOT)
- UN number: Not applicable
- UN proper shipping name: Not applicable
- Transport hazard classes: Not applicable
- Note: Product is not dangerous according to regulations

Marine Transport
- UN number: Not applicable
- UN proper shipping name: Not applicable
- Transport hazard classes: Not applicable
- Marine pollutant: No
- Note: Product is not dangerous according to regulations

Air Transport
- UN/ID number: Not applicable
- UN proper shipping name: Not applicable
- Transport hazard classes: Not applicable
- Note: Product is not dangerous according to regulations

Other Notes:
- Protect from freezing during transport to avoid damage to product

Section 15. Regulatory Information

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

- OSHA Hazardous Communications Standard (29CFR 1910.1200): This product is not considered hazardous
- SARA Hazard Categories: No data available
- TSCA: This product contains materials listed in the TSCA inventory or otherwise complies with TSCA requirements.
- CERCLA: No reportable ingredients
- US - SARA - Section 313: No reportable ingredients
- California Prop 65: This product contains no chemicals known by the state of California to cause cancer or birth defects.

Section 16. Other Information

- Last Revision Date: New SDS
- Preparation Date: 03/01/2015

Disclaimer

This document has been prepared using data from current manufacturer's SDS's of the component parts of the product and from other sources considered to be technically reliable. This document is not meant to be an all-inclusive document on worldwide hazard communication regulations and shall be used only as a guide. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment, in addition to complying with all Federal, State, Provincial and Local laws and regulations. The information contained in this SDS is furnished without warranty, expressed or implied, regarding the accuracy or results obtained from the use thereof. Vacalon assumes no legal responsibility for the use or reliance upon the data in this sheet. In no event will the manufacturer or the distributor be responsible for damages of any nature whatsoever resulting from the use of or reliance upon this information or the misuse of the product.

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