SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name: NANOMYTE® SR-100 (Part A)
CAS Number: A CAS number has not been assigned to this product.

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses: Abrasion resistant coating for plastics, metals, and other surfaces

1.3 Details of the Supplier of the Safety Data Sheet

Company: NEI Corporation
Address: 400 Apgar Drive, Unit E | Somerset, NJ 08873 – USA
Phone: +1 (732) 868-3141 Fax: +1 (732) 868-3143
Email: productinfo@neicorporation.com

1.4 Emergency Telephone Numbers

Manufacturer: +1 (732) 868-3142 (9am to 6pm EST / UTC -0500)
U.S. Poison Control Center: +1 (800) 222-1222
ChemTel (North America): +1 (800) 255-3924 (during transportation only)
ChemTel (International): +1 (813) 248-0585 (during transportation only – collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable Liquids (Category 2), H225 – Methanol, Ethanol
Flammable Liquids (Category 3), H226 – 2-Butanol
Acute toxicity, Oral (Category 3), H301 – Methanol
Acute toxicity, Dermal (Category 3), H311 – Methanol
Eye irritation (Category 2A), H319 – 2-Butanol, Ethanol
Acute toxicity, Inhalation (Category 3), H331 – Methanol
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 – 2-Butanol
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336 – 2-Butanol
Specific target organ toxicity - single exposure (Category 1), H370 – Methanol

2.2 GHS Label elements, including precautionary statements

Pictogram(s):

Signal Word: Danger

Hazard Statement(s):

H225 Highly flammable liquid and vapor
H226 Flammable liquid and vapor
H319 Causes serious eye irritation
H301 + H311 + H331 Toxic if swallowed, in contact with skin, or if inhaled
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
H370 Causes damage to organs

Precautionary Statement(s):

P210 Keep away from heat / sparks / open flames / hot surfaces — no smoking
P233 Keep container tightly closed
P260 Do not breathe dust / fume / gas / mist / vapors / spray
P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P280 Wear protective gloves, protective clothing, eye protection, face protection
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P311 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention
P363 Wash contaminated clothing before reuse
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS
May form explosive peroxides (2-Butanol)

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Hazard Classifications</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol (CH$_3$OH)</td>
<td>67-56-1</td>
<td>Flam. Liq. (Cat.2) – H225; Acute Tox. (Cat.3) - H301 + H311 + H331; STOT SE (Cat.1) – H370</td>
<td>2 – 5 %</td>
</tr>
<tr>
<td>2-Butanol (C$_4$H$_9$O)</td>
<td>78-92-2</td>
<td>Flam. Liq. (Cat.3) – H226; Eye Irrit. (Cat.2A) – H319; STOT SE (Cat.3) – H335, H336</td>
<td>3 – 4 %</td>
</tr>
<tr>
<td>Ethanol (C$_2$H$_6$O)</td>
<td>64-17-5</td>
<td>Flam. Liq. (Cat.2) – H225; Eye Irrit. (Cat.2A) – H319</td>
<td>4 – 10 %</td>
</tr>
<tr>
<td>Proprietary Resin</td>
<td>n/a</td>
<td>No known hazards</td>
<td></td>
</tr>
<tr>
<td>Water (H$_2$O)</td>
<td>7732-18-5</td>
<td>No known hazards</td>
<td>60 – 75 %</td>
</tr>
</tbody>
</table>

Hazard Classification Statements in this section have been abbreviated; refer to Section 2 for full text.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice:
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

After Inhalation:
If breathed in, remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.

After Skin Contact:
Immediately remove all contaminated clothing. Rinse skin with copious amounts of water / shower. Seek medical attention if irritation develops.

After Eye Contact:
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice / attention.

After Ingesting:
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a POISON CENTER or doctor/physician IF you feel unwell.
4.2 Most Important Symptoms and Effects, Both Acute and Delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed
No Data Available

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide

5.2 Special Hazards Arising from the Substance or Mixture
Carbon oxides

5.3 Advice for Firefighters
Wear full protective clothing and self-contained breathing apparatus approved for firefighting

5.4 Other Information
Use water spray to cool unopened containers

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures
Use personal protective equipment. Ensure adequate ventilation. Avoid breathing vapors, mist, or gas. Keep unprotected persons away. Eliminate all sources of ignition. Ventilate area and wash spill site after material pickup is complete.

6.2 Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and Materials for Containment and Cleaning Up
Dike area to prevent spreading. Absorb on vermiculite, sand or other inert absorbing material. Dispose of as a chemical waste in accordance with current local, state and federal regulations.

6.4 Reference to Other Sections
For safe handling, see Section 7; for personal protection, see Section 8; for disposal, see Section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling
Appropriate personal protective equipment should be used at all times. Provide good ventilation or extraction. Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapor or mist. Keep away from heat, sparks, flames and other sources of ignition.

7.2 Conditions for Safe Storage (including any incompatibilities)
For best coating performance, keep container tightly sealed and store in a dry and cool area. Avoid storage above 40°C / 104°F and contamination with incompatible materials. Keep away from heat, sparks, flames and other sources of ignition.

7.3 Specific End Uses
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters
Components with workplace control parameters:

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS #</th>
<th>Concentration</th>
<th>Value</th>
<th>ACGIH (TLV)</th>
<th>OSHA (PEL)</th>
<th>NIOSH (REL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>2 – 5 %</td>
<td>TWA</td>
<td>200 ppm 262 mg/m³</td>
<td>200 ppm 260 mg/m³</td>
<td>200 ppm 260 mg/m³</td>
</tr>
<tr>
<td>2-Butanol</td>
<td>78-92-2</td>
<td>3 – 4 %</td>
<td>TWA</td>
<td>100 ppm 303 mg/m³</td>
<td>150 ppm 450 mg/m³</td>
<td>100 ppm 305 mg/m³</td>
</tr>
</tbody>
</table>
### Component Name | CAS #  | Concentration | Value | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>4 – 10 %</td>
<td>TWA</td>
<td>1,000 ppm</td>
<td>1,000 ppm</td>
<td>1,000 ppm</td>
</tr>
</tbody>
</table>

**Notes:** PEL – Permissible ExposureLimit; TLV – Threshold Limit Values; REL – Recommended Exposure Limits

### 8.2 Exposure Controls

#### Appropriate Engineering Controls
Handle in accordance with good industrial hygiene and safety practice. Keep away from food and beverages. Provide good ventilation or extraction. Safety shower and eye bath recommended. Wash hands before breaks & after workday.

#### Personal Protective Equipment

**Respiratory Protection:**
Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye / Face Protection:**
Face shield and/or safety glasses should be worn. Use eye protection equipment that is tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Hand Protection:**
Handle with chemical resistant gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands after use.

**Skin and Body Protection:**
Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Control of Environmental Exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on Basic Physical and Chemical Properties

- **Form:** Liquid, clear
- **Color:** Colorless
- **Odor:** Alcohol-like
- **pH:** No Data Available
- **Melting / Freezing Point:** No Data Available
- **Initial Boiling Point / Range:** No Data Available
- **Flashpoint (closed cup):** No Data Available
- **Evaporation Rate:** No Data Available
- **Flammability (solid, gas):** No Data Available
- **Upper Explosion Limit:** No Data Available
- **Lower Explosion Limit:** No Data Available
- **Vapor Pressure (20.0 °C):** No Data Available
- **Vapor Density:** No Data Available
- **Relative Density:** No Data Available
- **Water Solubility:** Soluble
- **Auto-ignition Temperature:** No Data Available
- **Decomposition Temperature:** No Data Available
Viscosity: No Data Available
Explosive Properties: No Data Available

9.2 Other Information
No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
No Data Available

10.2 Chemical Stability
Stable under recommended storage conditions (see Section 7.2)

10.3 Possibility of Hazardous Reactions
No Data Available

10.4 Conditions to Avoid
Heat, flames and sparks

10.5 Incompatible Materials
Acid chlorides, acid anhydrides, oxidizing agents, alkali metals, reducing agents, acids, halogens, peroxides

10.6 Hazardous Decomposition Products
Other decomposition products: no data available; Under fire conditions: see Section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects
The chemical, physical, and toxicological properties of this product have not been thoroughly investigated. Toxicological information for the components has been provided where available.

Acute Toxicity
Oral LD50: No Data Available
Inhalation LC50: No Data Available
Dermal LD50: No Data Available
Other Information: No Data Available

Skin Corrosion/Irritation
No Data Available

Serious Eye Damage/Eye Irritation
May cause moderate eye irritation [ethanol]

Respiratory or Skin Sensitization
No Data Available

Germ Cell Mutagenicity
No Data Available

Carcinogenicity
IARC: Group 1: Carcinogenic to humans (ethanol in alcoholic beverages)
ACGIH: Group A3: Confirmed animal carcinogen with unknown relevance to humans (ethanol only)
NTP: No component of this product (present at levels greater than or equal to 0.1%) is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product (present at levels greater than or equal to 0.1%) is identified as a carcinogen or potential carcinogen by OSHA.
Ethanol: Carcinogenicity - Mouse – Oral, Tumorigenic; Equivocal tumorigenic agent by RTECS criteria; Liver, Tumors, Blood, Lymphomas (including Hodgkin’s disease).
Reproductive Toxicity

**Ethanol:** Reproductive toxicity - Human - female – Oral; Effects on Newborn: Apgar score (human only). Effects on Newborn: Other neonatal measures or effects. Effects on Newborn: Drug dependence.

**2-Butanol:** Reproductive toxicity – Rat – Inhalation; Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Musculoskeletal system. Developmental Toxicity - Rat – Inhalation; Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

**Methanol:** Damage to fetus not classifiable; Fertility classification not possible from current data.

Teratogenicity

No Data Available

**Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System)**

- **Ethanol:** No data available
- **2-Butanol:** Respiratory system, central nervous system
- **Methanol:** Causes damage to organs (liver, kidney)

**Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System)**

No Data Available

**Aspiration Hazard**

- **2-Butanol:** Aspiration into the lungs may result in chemical pneumonitis

**Additional Information**

**Ethanol** (RTECS: KQ6300000)

Exposure Routes: inhalation, ingestion, skin and/or eye contact
Symptoms of Short Term Exposure: The substance irritates the eyes. Inhalation of high concentration of vapor may cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system.
Symptoms of Long Term Exposure: The liquid defats the skin. The substance may have effects on the upper respiratory tract and central nervous system, resulting in irritation, headache, fatigue and lack of concentration.

**2-Butanol** (RTECS: EO1750000)

Exposure Routes: inhalation, ingestion, skin and/or eye contact
Symptoms of Short Term Exposure: The substance is irritating to the eyes. Exposure far above the OEL could cause lowering of consciousness. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis.
Symptoms of Long Term Exposure: The liquid defats the skin.

**Methanol** (RTECS: PC1400000)

Exposure Routes: inhalation, skin absorption, ingestion, skin and/or eye contact
Symptoms of Short Term Exposure: The substance is irritating to the eyes, the skin and the respiratory tract. The substance may cause effects on the central nervous system, resulting in loss of consciousness.
Symptoms of Long Term Exposure: Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the central nervous system, resulting in persistent or recurring headaches and impaired vision.

### SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity**

The toxicological properties of this material have not been fully investigated.

**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**

PBT/vPvB assessment not available as chemical safety assessment not conducted
12.6 Other Adverse Effects
No Data Available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging
Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

14.1 Department of Transportation (DOT - US)

<table>
<thead>
<tr>
<th>UN number</th>
<th>Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1866</td>
<td>3</td>
<td>III</td>
</tr>
</tbody>
</table>

Proper Shipping Name: Resin Solution, flammable

14.2 International Maritime Dangerous Goods (IMDG)

<table>
<thead>
<tr>
<th>UN number</th>
<th>Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1866</td>
<td>3</td>
<td>III</td>
</tr>
</tbody>
</table>

Proper Shipping Name: Resin Solution, flammable

14.3 International Air Transport Association (IATA)

<table>
<thead>
<tr>
<th>UN number</th>
<th>Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1866</td>
<td>3</td>
<td>III</td>
</tr>
</tbody>
</table>

Proper Shipping Name: Resin Solution, flammable

14.4 Additional Transport Information

HS Classification #: 3208.90  Schedule B #: 3208.90.0000

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
</tr>
<tr>
<td>2-Butanol</td>
<td>78-92-2</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

The following product components are cited on the lists below:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>List Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>PA, MA, NJ Right to Know</td>
</tr>
<tr>
<td>2-Butanol</td>
<td>78-92-2</td>
<td>PA, MA, NJ Right to Know</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>PA, MA, NJ Right to Know</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
</tr>
</tbody>
</table>
15.2 Chemical Safety Assessment

A chemical safety assessment was not carried out for this product.

SECTION 16: OTHER INFORMATION

REACH Number
A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

<table>
<thead>
<tr>
<th>HMIS Classification</th>
<th>NFPA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard:</td>
<td>Health Hazard:</td>
</tr>
<tr>
<td>Health Hazard:</td>
<td>Flammability Hazard:</td>
</tr>
<tr>
<td>Physical Hazard:</td>
<td>Reactivity Hazard:</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Further Information
NEI has attempted to provide current and accurate information to the best of its knowledge. NEI makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, injury of any kind which may result from or arise out of the use of or reliance on the information by any person. Employers should use this information only as a supplement to other information gathered by them and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

END OF SDS