SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

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

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

Identified Uses: Laboratory chemicals, coating, surface treatment

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 3), H226
Eye irritation (Category 2A), H319 – 2-Butanol, Ethanol
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Specific target organ toxicity - single exposure (Category 2), H371

2.2 GHS Label elements, including precautionary statements

Pictogram(s):  
Signal Word: Warning
Hazard Statement(s):

H226 Flammable liquid and vapor
H319 Causes serious eye irritation
H302 Harmful if swallowed
H332 Harmful if inhaled
H371 May cause damage to organs

Precautionary Statement(s):

P210 Keep away from heat / sparks / open flames / hot surfaces — no smoking
P260 Do not breathe dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves, protective clothing, eye protection, face protection
P301 + P312 + P330 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell. Rinse mouth.
P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
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
Hazardous Components

<table>
<thead>
<tr>
<th>Component Name</th>
<th>Formula</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>C₂H₅O</td>
<td>64-17-5</td>
<td>4 – 10 %</td>
</tr>
<tr>
<td>2-Butanol</td>
<td>C₄H₁₀O</td>
<td>78-92-2</td>
<td>2 – 4 %</td>
</tr>
<tr>
<td>Methanol</td>
<td>CH₃OH</td>
<td>67-56-1</td>
<td>2 – 4 %</td>
</tr>
</tbody>
</table>

Hazard Classifications:
- Ethanol: Highly flammable liquid and vapor (Category 2, H225); Causes serious eye irritation (Category 2A, H319)
- 2-Butanol: Flammable liquid (Category 3, Hx); Eye irritation (Category 2A, H319); Specific target organ toxicity, single exposure (Category 2, H371)
- Methanol: Highly flammable liquid and vapor (Category 2, H225); Harmful if swallowed (Category 4, H302); Harmful if inhaled (Category 4, H332); May cause damage to organs (Category 2, H371)

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

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

After Inhalation:
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

After Skin Contact:
Wash off with soap and plenty of water. Seek medical attention.

After Eye Contact:
Rinse eyes thoroughly with plenty of water for at least 15 minutes and seek medical attention.

After Swallowing:
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed
The most important known symptoms and effects are described in 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
Diike 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
Personal protective equipment should be used at all times (see Section 8.2). 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)
Keep container tightly closed in a dry and well-ventilated place. Avoid extreme cold or hot storage temperatures. Opened containers must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Flammable liquids

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 – 4 %</td>
<td>TWA</td>
<td>200 ppm</td>
<td>200 ppm</td>
<td>200 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>262 mg/m³</td>
<td>260 mg/m³</td>
<td>260 mg/m³</td>
</tr>
<tr>
<td>2-Butanol</td>
<td>78-92-2</td>
<td>2 – 4 %</td>
<td>TWA</td>
<td>100 ppm</td>
<td>150 ppm</td>
<td>100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>303 mg/m³</td>
<td>450 mg/m³</td>
<td>305 mg/m³</td>
</tr>
<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>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,900 mg/m³</td>
<td>1,900 mg/m³</td>
<td>1,900 mg/m³</td>
</tr>
</tbody>
</table>

Notes: PEL – Permissible Exposure Limit; 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 respirator with multipurpose combination (US) or type A2 (for organic vapors) 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.
Recommendations: butyl-rubber, 0.5mm thick (full contact); Nitrile rubber, 0.4mm thick (splash contact)
Recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use. It should not be construed as offering an approval for any specific use scenario.

Skin and Body Protection:
Complete suit protecting against chemicals; Flame retardant antistatic protective clothing; Impervious clothing. 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: Mild
Odor Threshold: No data available
Refractive Index: No data available
pH: No data available
Freezing point/range: No data available
Initial Boiling point/range: No data available
Flashpoint: No data available
Auto-ignition Temperature: No data available
Decomposition Temperature: No data available
Flammability (solid, gas): No data available
Evaporation Rate: No data available
Lower Explosion Limit: No data available
Upper Explosion Limit: No data available
Vapor Pressure: No data available
Relative Vapor Density: No data available
Relative Density: No data available
Water Solubility: No data available
Viscosity, kinematic: No data available
Oxidizing 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

Acute Toxicity
- Oral LD50: No data available
- Inhalation LC50: No data available
- Dermal LD50: No data available

Skin corrosion/irritation
Not classified

Serious eye damage/eye irritation
Not classified

Respiratory or skin sensitization
Not classified

Germ cell mutagenicity
Not classified

Carcinogenicity
No classification data on carcinogenic properties of this material is available from EPA, IRAC, NTP, OSHA or ACGIH.

Reproductive toxicity
Not classified

Teratogenicity
Not classified

Specific target organ toxicity - single exposure (Globally Harmonized System)
Not classified

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
Not classified

Aspiration hazard
Not classified

Additional Information
The chemical, physical, & toxicological properties have not been thoroughly investigated.

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)
   UN number: 1866  Class: 3  Packing Group: III
   **Proper Shipping Name:** Resin Solution, flammable

14.2 International Maritime Dangerous Goods (IMDG)
   UN number: 1866  Class: 3  Packing Group: III
   **Proper Shipping Name:** Resin Solution, flammable

14.3 International Air Transport Association (IATA)
   UN number: 1866  Class: 3  Packing Group: III
   **Proper Shipping Name:** Resin Solution, flammable

14.4 Additional Transport Information
   HS Code: 2931.90  Schedule B: 2931.90.0090
   Ground Limited Quantities: 5L (net) / 30kg (gross)
   Air Excepted Quantities (EQ): 30mL (max net per inner pkg) / 1L (gross, outer pkg) [E1]
   Air Limited Quantities (LQ): 10L (Y344)

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:
   - Methanol (CAS #67-56-1);
   - 2-Butanol (CAS #78-92-2)

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

   **Right to Know Components (PA, MA, NJ)**
   - Methanol (CAS #67-56-1);
   - 2-Butanol (CAS #78-92-2);
   - Ethanol (CAS #64-17-5)
CALIFORNIA PROPOSITION 65
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Component: Methanol (CAS #67-56-1)

15.2 Chemical Safety Assessment
A chemical safety assessment was not carried out for this product

SECTION 16: OTHER INFORMATION

<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>2</td>
<td>2</td>
</tr>
<tr>
<td>Flammability Hazard:</td>
<td>Flammability Hazard:</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Physical Hazard:</td>
<td>Reactivity Hazard:</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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.

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 -