

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name: NANOMYTE® SAF-100 (Part B)

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)

Eye irritation (Category 1), H318

2.2 GHS Label elements, including precautionary statements

Pictogram(s):



Signal Word: Danger

Hazard Statement(s):

H318 Causes serious eye damage

Precautionary Statement(s):

P280 Wear protective gloves, protective clothing, eye protection, face protection

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Additional methanol may be formed by reaction with moisture and water.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Component Name	Formula	CAS #	Concentration
Trade Secret	n/a	Proprietary	≤ 100%
Hazard Classifications:	Eye Damage (Category 1), H318		

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice:

Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately. Show this safety data sheet to the doctor in attendance.

After Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

After Skin Contact:

Wash with plenty of soap and water. Get medical advice/attention.

After Eye Contact:

Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

After Ingestion:

Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

- Symptoms/effects after inhalation: May cause irritation to the respiratory tract.
- Symptoms/effects after skin contact: May cause mild skin irritation.
- Symptoms/effects after eye contact: Causes serious eye damage.
- Symptoms/effects after ingestion: Oral toxicity is associated with methanol, the solvent and a hydrolysis product which causes nausea, vomiting, headache, visual effects including blindness. Onset of symptoms may be delayed up to 48 hours.
- Chronic symptoms: On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system. Methanol may affect the central nervous system resulting in persistent or recurring headaches or impaired vision.

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable Extinguishing Media

Water spray. Foam. Carbon dioxide. Dry chemical.

5.2 Special Hazards Arising from the Substance or Mixture

Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame. Can react exothermically with amines.

5.3 Advice for Firefighters

Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces. Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapor and mist.

5.4 Other Information

Do not use straight streams.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

Use personal protective equipment (see Section 8). Ensure adequate ventilation. Avoid breathing vapors, mist, or gas. Keep unprotected persons away.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and Materials for Containment and Cleaning Up

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

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. Avoid all eye and skin contact and do not breathe vapor and mist. Provide good ventilation in process area to prevent accumulation of vapors.

7.2 Conditions for Safe Storage (including any incompatibilities)

Keep container tightly closed in a dry and well-ventilated place. Containers that are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat, amines, moisture, and water.

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

Contains no substances with occupational exposure limit values.

8.2 Exposure Controls

Appropriate Engineering Controls

Handle in accordance with good industrial hygiene and safety practice. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Personal Protective Equipment

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Respiratory Protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) 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:

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Contact lenses should not be worn.

Skin Protection:

Handle with 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.

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. Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Form: Liquid, clear

Color:	Straw
Odor:	Mild
Odor Threshold:	No data available
Refractive Index:	1.429
pH:	No data available
Freezing point/range:	< -70 °C
Initial Boiling point/range:	120 °C @ 2 mm Hg
Flashpoint:	135 °C
Auto-ignition Temperature:	231 °C
Decomposition Temperature:	No data available
Flammability (solid, gas):	No data available
Evaporation Rate:	No data available
Lower Explosion Limit:	0.43 %(V)
Upper Explosion Limit:	No data available
Vapor Pressure:	2 mm Hg @ 120 °C
Relative Vapor Density:	8.1 @ 20 °C
Relative Density:	1.07
Water Solubility:	Reacts with water
Viscosity, kinematic:	3.2 cSt
Oxidizing Properties:	No data available

9.2 Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Can react exothermically with amines; reacts with water

10.2 Chemical Stability

Stable in sealed containers

10.3 Possibility of Hazardous Reactions

Reacts with water and moisture in air, liberating methanol

10.4 Conditions to Avoid

Heat, open flame, sparks

10.5 Incompatible Materials

Amines, moisture, water

10.6 Hazardous Decomposition Products

Methanol, organic acid vapors

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute Toxicity

Oral LD50:	8400 mg/kg (rat)
Inhalation LC50:	> 5.3 mg/l/4h (rat)
Dermal LD50:	4,248 mg/kg (rabbit)

Skin corrosion/irritation

Not classified - Skin Irritation - rabbit: 500 mg open: mild irritant effect

Serious eye damage/eye irritation

Causes serious eye damage. Irreversible effects on the eye: rabbit

Respiratory or skin sensitization

Not classified

Germ cell mutagenicity

Not classified - weakly mutagenic in Ames in vitro screening. In vivo studies have shown that repeated exposure to this material, even at otherwise toxic doses, does not cause any mutagenic events. No tumorigenic response to the chronic recurrent application of the material to the skin of mice was observed.

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

Chronic Symptoms: On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system. Methanol may affect the central nervous system resulting in persistent or recurring headaches or impaired vision.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

EC50 Daphnia 1: 324 mg/l *Simocephalus vetulus*

ErC50 (algae): 119 mg/l *Anabaena flos-aquae*

12.2 Persistence and Degradability

No data available

12.3 Bioaccumulative Potential

Log Pow: -2.6

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB Assessment

Not considered to be either PBT nor vPvB

12.6 Other Adverse Effects

This substance may be hazardous to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product / Packaging Disposal

May be incinerated. Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. Do not dispose of waste into sewer.

SECTION 14: TRANSPORT INFORMATION

14.1 Department of Transportation (DOT - US)

Not regulated for transport

14.2 International Maritime Dangerous Goods (IMDG)

Not regulated for transport

14.3 International Air Transport Association (IATA)

Not regulated for transport

14.4 Additional Transport Information

HS Code: 2931.90

Schedule B: 2931.90.0090

SECTION 15: REGULATORY INFORMATION

15.1 U.S. Safety, Health and Environmental Regulations/Legislations

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA 302 Components

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

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

The following product components are cited on the lists below:

<u>Component</u>	<u>CAS #</u>	<u>List Citations</u>
Trade Secret	Proprietary	PA, NJ Right to Know

CALIFORNIA PROPOSITION 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 International Safety, Health and Environmental Regulations/Legislations

CANADA: Listed on the Canadian DSL (Domestic Substances List)

EU: Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

OTHER: Listed on the AICS (Australian Inventory of Chemical Substances)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on the Korean ECL (Existing Chemicals List)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Listed on CICR (Turkish Inventory and Control of Chemicals)

15.3 Chemical Safety Assessment

A chemical safety assessment was not carried out for this product

SECTION 16: OTHER INFORMATION

HMIS Classification

Health Hazard: 3
 Flammability Hazard: 1
 Physical Hazard: 1

NFPA Rating

Health Hazard: 3
 Flammability Hazard: 1
 Reactivity Hazard: 1

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 -