

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name: NANOMYTE® SR-200EC (Part B)

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 Number

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

Acute toxicity, Oral (Category 4), H302

Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318

Short-term (acute) aquatic hazard (Category 3), H402

2.2 Label Elements

GHS Label Elements, including precautionary statements

Pictogram(s):



Signal Word: Danger

Hazard Statement(s):

H225 Highly flammable liquid and vapor

H302 Harmful if swallowed

H315 Causes skin irritation

H318 Causes serious eye damage

H402 Harmful to aquatic life

Precautionary Statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

NANOMYTE® SR-200EC (Part B)

- P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
- P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- P403 + P233 + P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.

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

May form explosive peroxides. Additional methanol may be formed by reaction with moisture and water. The US OSHA PEL (TWA) for methanol is 200 ppm.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Hazardous Components

Component Name	Formula	CAS #	Wt. %
Proprietary Resin	n/a	n/a	75 – 80%
Hazard Classification: Serious eye damage (Category 1, H318); Short-term (acute) aquatic hazard (Category 3, H402)			
2-Methyltetrahydrofuran	C ₅ H ₁₀ O	96-47-9	20 – 25%
Hazard Classification: Flammable liquids (Category 2, H225); Acute toxicity, Oral (Category 4, H302); Skin irritation (Category 2, H315); Serious 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 the label where possible). If possible, show this safety data sheet; if not available show packaging or label.

In Case of Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical advice if feeling unwell.

In Case of Skin Contact:

Immediately remove all contaminated clothing. Rinse skin with water/ shower. Seek medical attention.

In Case of Eye Contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

In Case of Ingestion:

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

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. 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. Additional known symptoms and effects are described in the labelling (see section 2.2) and/or section 11.

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

A component of 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

Use carbon dioxide (CO₂), alcohol-resistant foam, dry chemical or carbon dioxide; do not use water.

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

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further 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. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

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

Avoid contact with skin and eyes. Provide good ventilation or extraction. Avoid prolonged or repeated breathing of vapor or mist. Appropriate personal protective equipment should be used at all times. Use explosion-proof equipment. Keep away from sources of ignition – no smoking. Take measures to prevent the buildup of electrostatic charge.

7.2 Conditions for Safe Storage (including any incompatibilities)

Keep container tightly closed in a dry and well-ventilated place. Store away from heat, amines, moisture, and water. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): 10: Combustible 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: 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. Provide good ventilation or extraction. Safety shower and eye bath recommended. Change contaminated clothing. Wash hands after working with substance.

Personal Protective Equipment

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).

Skin 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.

Recommendation: Butyl rubber, 0.7mm thick (full contact); Nitrile rubber, 0.4mm thick (splash contact)

This recommendation is advisory only and must be evaluated for the specific situation of anticipated use. It should not be construed as offering an approval for any specific use scenario.

Body Protection:

Impervious, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. 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).

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
pH:	No data available
Freezing point/range:	No data available
Initial Boiling point/range:	No data available
Flashpoint:	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:	No data available
Vapor Density:	No data available
Relative Density:	No data available
Water Solubility:	No data available
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

May form explosive mixtures with air on intense heating; may react with water to release methanol. Can react exothermically with amines.

10.2 Chemical Stability

Chemically stable under standard ambient conditions (room temperature). May form peroxides on prolonged storage

10.3 Possibility of Hazardous Reactions

Vapors may form explosive mixture with air. Reacts with water and moisture in air, liberating methanol.

10.4 Conditions to Avoid

Heat, flames, sparks, amines, moisture, water

10.5 Incompatible Materials

Strong oxidizing agents, strong bases, strong acids

10.6 Hazardous Decomposition Products

Carbon oxides, silicon oxides, organic acid vapors. Methanol is given off during processing and by reaction with water.

In the event of fire, see Section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50
Proprietary Resin	8,030 mg/kg (rat)	4,248 mg/kg (rabbit)	> 5.3 mg/l (rat – 4hrs)
2-Methyltetrahydrofuran	> 300 mg/kg (rat, female)	> 2,000 mg/kg (rat)	6,000 ppm (rat – 4hrs)

Skin corrosion/irritation

Irritating to skin

Serious eye damage/eye irritation

Risk of serious damage to eyes

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA.

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Additional Information

Material may form a siloxane polymer on the skin, eyes, or in the lungs. In the event of direct contact of the liquid with these tissues, seek medical attention.

The chemical, physical, and toxicological properties of this product have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Component	Green Algae (EC50)	Freshwater Fish (LC50)	Water Flea (EC50)
Proprietary Resin	255 mg/l - 72 h	55 mg/l - 96 h (carp)	473 mg/l - 48 h
2-Methyltetrahydrofuran	104 mg/l - 72 h	> 100 mg/l - 96 h (rainbow trout)	139 mg/l - 48 h

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: II
 Proper Shipping Name: Resin Solution, flammable

14.2 International Maritime Dangerous Goods (IMDG)

UN number: 1866 Class: 3 Packing Group: II
 Proper Shipping Name: Resin Solution, flammable

14.3 International Air Transport Association (IATA)

UN number: 1866 Class: 3 Packing Group: II
 Proper Shipping Name: Resin Solution, flammable

14.4 Additional Transport Information

HS Code (first 6 digits) / Schedule B #: 3208.90.0000
 Ground Limited Quantities: 1L (net) / 30kg (gross)
 Air Excepted Quantities (EQ): 30mL (net) / 0.5L (gross) [E2]
 Air Limited Quantities (LQ): 1L (gross) [Y341]

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.

NANOMYTE® SR-200EC (Part B)

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

Fire Hazard, Acute Health Hazard

Right to Know Components

<u>Component</u>	<u>CAS #</u>	<u>State</u>
2-Methyltetrahydrofuran	96-47-9	MA, NJ, PA 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.

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.

HMIS Classification

Health Hazard: 2
Flammability Hazard: 3
Physical Hazard: 0

NFPA Rating

Health Hazard: 2
Flammability Hazard: 3
Reactivity Hazard: 0

IMPORTANT

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 –