

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name: NANOMYTE[®] AM-100EC

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, N	J 08873 – USA
Phone:	+1 (732) 868-3141	Fax:	+1 (732) 868-3143
Email:	productinfo@neicorpora	tion.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

Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

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

2.2 GHS Label elements, including precautionary statements

Pictogram(s):



Signal Word: Danger

Hazard Statement(s):

H226 Flammable liquid and vapor

- H315 Cause skin irritation
- H318 Causes serious eye damage
- H336 May cause drowsiness or dizziness
- H402 Harmful to aquatic life

Precautionary Statement(s):

- P210 Keep away from heat/sparks/open flames/hot surfaces no smoking
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- P271 Use only outdoors or in a well-ventilated area
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 - P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/ attention.

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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

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Component Name	CAS #	Weight %			
Butyl Acetate	123-86-4	77 – 81%			
Hazard Classifications: Flam Liq (Cat 3, H226); STOT – SE (Cat 3, CNS, H336); Acute Aq Haz (Cat 3, H402)					
Proprietary Polymer Resin	n/a	15 – 18%			
Hazard Classifications: Flam Liq (Cat 4, H2327); Skin irritation (Cat 2, H315); Serious eye damage (Cat 1, H318)					
Silicon Dioxide	7631-86-9	1 – 2%			
Hazard Classifications: None					
Octadecyldimethyl(3-trimethoxysilylpropyl)ammonium chloride	27668-52-6	1 - 3%			
Hazard Classifications: Eye irritation (Cat 2A, H319)					

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 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.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide (CO2), Foam, Dry powder

Unsuitable Extinguishing Media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special Hazards Arising from the Substance or Mixture

Carbon oxides. Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapors possible in the event of fire.



5.3 Advice for Firefighters

Wear full protective clothing and self-contained breathing apparatus approved for firefighting.

5.4 Further Information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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

Do not let product enter drains. Risk of explosion.

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. Dispose of properly. Clean up affected area.

6.4 Reference to Other Sections

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 prolonged or repeated breathing of vapor. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Use explosion-proof equipment. Keep away from heat, sparks, flames and other sources of ignition – no smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for Safe Storage (including any incompatibilities)

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Residual vapors might explode on ignition. Do not apply heat, cut, drill, and grind or weld on or near this container.

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific End Uses

A part 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:

Component Name	CAS #	Value	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Butyl Acetate	123-86-4	TWA	150 ppm	150 ppm 710 mg/m ³	150 ppm 710 mg/m ³
		STEL	200 ppm	200 ppm 950 mg/m ³	200 ppm 950 mg/m ³
Remarks:	Upper Respiratory Tract irritation; Eye irritation				

Notes: PEL - Permissible Exposure Limit; TLV - Threshold Limit Values; REL - Recommended Exposure Limits;

STEL – Short Term Exposure Limit; TWA – Time Weighted Average

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

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 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).

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

Liquid
Translucent
Mild, fruity
No data available
No data available
No data available
27 °C (81 °F)
No data available

9.2 Other Information

No additional information available



SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Vapor/air-mixtures are explosive at intense warming.

10.2 Chemical Stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of Hazardous Reactions

Hydrolysis. Risk of explosion with alkali metals, alkali hydroxides, and strong oxidizing agents.

10.4 Conditions to Avoid

Keep away from heat, sparks, flames, and humidity. Vapors may form explosive mixtures with air.

10.5 Incompatible Materials

Rubber, various plastics, humidity, water, acids, and bases

10.6 Hazardous Decomposition Products

Methanol in case of hydrolysis. Isocyanate-containing vapors (in 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
Butyl Acetate	10,760 mg/kg (rat)	14,112 mg/kg (rabbit)	9.6 - 29.2 mg/L (rat, 4 hrs)
Proprietary Resin	2,970 mg/kg (rat)	11,300 mg/kg (rat)	No Data Available
Silicon Dioxide	5,000 mg/kg (rat)	5,000 mg/kg (rabbit)	5.01 mg/l – aerosol (rat, 4hrs)
Octadecyldimethyl(3-trimethoxysilylpropyl) ammonium chloride	500 mg/kg body wt	1500 mg/kg body wt	15 mg/l/4h

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

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

No data available

Teratogenicity

Laboratory experiments have shown teratogenic effects in rats (butyl acetate)

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

May cause drowsiness or dizziness - Central Nervous System

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

No data available

Aspiration hazard

No data available



Additional Information

RTECS: AF7350000 (butyl acetate); RG0186000 (Octadecyldimethyl(3-trimethoxysilylpropyl)ammonium chloride); VV7310000 (Silicon Dioxide)

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)
Butyl Acetate	397 mg/l – 72 hours	18 mg/l – 96 hours (fathead minnow)	44 mg/l – 48 hours
Proprietary Resin	No data available	934 mg/l – 96 hours (zebra fish)	331 mg/l – 48 hours
Silicon Dioxide	173.1 mg/l	5,000 mg/l - 96 hours (fathead minnow)	5,000 mg/l
Octadecyldimethyl (3-trimethoxysilylpropyl) ammonium chloride	General: Toxic to aquatic organisms		

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

Discharge into the environment must be avoided.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Product

Contact a licensed professional waste disposal service to dispose of this material. Waste must be disposed of in accordance with national and local regulations. Leave chemicals in original containers. No mixing with other waste. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. DO NOT HEAT or cut the empty container with electric or gas torch.

Contaminated Packaging

Empty containers must be handled with care due to product residue. Handle uncleaned containers like the product itself. Do not reuse empty containers and dispose of in accordance with national and local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 Department of Transportation (I	DOT - US)		
UN number: 1866	Class: 3	Packing Group: III	
Proper Shipping Name: Resin Sol	ution, flammable		
14.2 International Maritime Dangero	us Goods (IMDG)		
UN number: 1866	Class: 3	Packing Group: III	
Proper Shipping Name: Resin Sol	ution, flammable		
14.3 International Air Transport Asso	ciation (IATA)		
UN number: 1866	Class: 3	Packing Group: III	
Proper Shipping Name: Resin Sol	ution, flammable		



14.4 Additional Transport Information

HS Classification #: 3208.90 Schedule B #: 3208.90.0000

Ground Limited Quantities: 5L (net) / 30kg (gross)

Air Excepted Quantities (EQ): 30mL (net) / 1L (gross) (E1)

Air Limited Quantities (LQ): 10L (gross) [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

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, Chronic Health Hazard

Right to Know Components

Butyl Acetate (CAS #123-86-4); Octadecyldimethyl(3-trimethoxysilylpropyl)ammonium chloride (CAS #27668-52-6); Silica (CAS #7631-86-9)

CALIFORNIA PROPOSITION 65

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

Toxic Substances Control Act (TSCA) Chemical Substance Inventory

Butyl Acetate (CAS #123-86-4); Octadecyldimethyl(3-trimethoxysilylpropyl)ammonium chloride (CAS #27668-52-6); Silica (CAS #7631-86-9)

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		NFPA Rating	
Health Hazard:	3	Health Hazard:	3
Flammability Hazard:	2	Flammability Hazard:	2
Physical Hazard:	1	Reactivity Hazard:	1

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 –