SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name: NANOMYTE® SuperCN Plus

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: Superhydrophobic 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 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

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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

Carcinogenicity (Category 2), H351

Reproductive toxicity (Category 1B), H360

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

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

H351 Suspected of causing cancer

H360 May damage fertility or the unborn child

Precautionary Statement(s):

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P233 Keep container tightly closed.

P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
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.
P304 + P340 + 312	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	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
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.
P405	Store locked up.
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.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Component Name	Synonyms	Formula	CAS #	Concentration
1-Methoxy-2-propanol	Propylene glycol methyl ether (PGME)	$C_4H_{10}O_2$	107-98-2	45 – 50 %
Tetrahydrofuran	THF	C_4H_8O	109-99-9	18 – 22 %
Trade Secret	(Proprietary Resin)	n/a	n/a	15 – 25 %
Water	n/a	H_2O	7732-18-5	2 – 8 %

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.

In Case of Inhalation:

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

In Case of Skin Contact:

Wash with soap and copious amounts of water. Seek medical attention if irritation develops.

In Case of Eye Contact:

Immediately flush eyes copiously with water for at least 15 minutes. Seek medical attention.

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

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. Flash back possible over considerable distance. Container explosion may occur under fire conditions. Vapors may form explosive mixture with air. May form peroxides of unknown stability.

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. For personal protection, see section 8.

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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

6.4 Reference to Other Sections

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 or mist. Avoid contact with skin and eyes. 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Air sensitive. Forms explosive peroxides on prolonged storage May form peroxides on contact with air. Dry residue is explosive. Test for peroxide formation periodically and before distillation.

Storage class (TRGS 510): 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	OSHA (OEL)	ACGIH (TLV)	NIOSH (REL)
Propylene glycol methyl ether (PGME)	107-98-2	TWA	N/A	50 ppm	100 ppm 360 mg/m^3
Remarks:	Upper Respiratory Tract irritation; Eye irritation; Not classifiable as a human carcinogen				

Component Name	CAS #	Value	OSHA (OEL)	ACGIH (TLV)	NIOSH (REL)
Tetrahydrofuran	109-99-9	TWA	200 ppm 590 mg/m^3	50 ppm	200 ppm 590 mg/m^3
Remarks:	Central Nervous System impairment; Upper Respiratory Tract irritation; Kidney damage; Confirmed animal carcinogen with unknown relevance to humans; Danger of cutaneous absorption				

Notes: OEL – Occupational 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 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:	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
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

No Data Available

10.2 Chemical Stability

May form peroxides on prolonged storage. Date container and periodically test for peroxides.

10.3 Possibility of Hazardous Reactions

Vapors may form explosive mixture with air.

10.4 Conditions to Avoid

Heat, flames and sparks.

10.5 Incompatible Materials

Strong oxidizing agents, acids

10.6 Hazardous Decomposition Products

No Data Available; in the event of fire, see Section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects (of components)

Acute Toxicity	**PGME (45-50%)**	**THF (18-22%)**
Oral LD50:	11,700 mg/kg (mouse)	1,650 mg/kg (rat)
Inhalation LC50:	10,000 ppm (rat – 5h)	14.7 mg/l (rat – 6h)
Dermal LD50:	13,000 mg/kg (rabbit)	2,000 mg/kg (rat)

Skin corrosion/irritation

No data available	Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Eyes - Rabbit Result: Mild eye irritation - 24 h	Eyes - Rabbit Result: Risk of serious damage to eyes (Draize Test)

Respiratory or skin sensitization

No data available	Based on available data, the classification criteria are not met.

Germ cell mutagenicity

No data available	In vivo tests did not show mutagenic effects

Carcinogenicity

Suspected human carcinogens (Tetrahydrofuran only)

IARC:	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:	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.

Reproductive toxicity

No data available	No data available

Teratogenicity

No data available

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

May cause drowsiness or dizziness	May cause drowsiness or dizziness - Nervous system May cause respiratory irritation

(cont.) **PGME (45-50%)** **THF (18-22%)**

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

No data available	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No data available	No aspiration toxicity classification

Additional Information

RTECS:	UB7700000	LU5950000

Stomach - Irregularities - Based on Human Evidence (both)

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

SECTION 12: ECOLOGICAL INFORMATION (Tetrahydrofuran only)

12.1 Toxicity

Toxicity to Fish:	LC50 - Pimephales promelas (fathead minnow) - 2,160 mg/l - 96 h
Toxicity to daphnia and other aquatic:	EC50 - Daphnia magna (Water flea) - 382 mg/l - 24 h
Toxicity to algae:	Growth inhibition IC50 - Algae - 3,700 mg/l - 192 h

12.2 Persistence and Degradability

Biodegradability: (OECD Test Guideline 301)
Remarks: According to the results of tests of biodegradability this product is not readily biodegradable.

12.3 Bioaccumulative Potential

No bioaccumulation is to be expected (log Pow <= 4)

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

HST Code / 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

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

Component Name	CAS #	Hazards
Tetrahydrofuran (THF)	109-99-9	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
1-Methoxy-2-Propanol (PGME)	107-98-2	Fire Hazard, Acute Health Hazard, Chronic Health Hazard

The following product components are cited on the lists below:

Component	CAS #	List Citations
Tetrahydrofuran (THF)	109-99-9	MA, NJ, PA Right to Know
1-Methoxy-2-Propanol (PGME)	107-98-2	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		NFPA Rating	
Health Hazard:	2	Health Hazard:	2
Flammability Hazard:	3	Flammability Hazard:	3
Physical Hazard:	0	Reactivity Hazard:	0

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.