SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name: NANOMYTE® PT-60

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: Chromate-free, self-healing conversion coating pretreatment for magnesium

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

The information in this SDS is related to the components of this material and may not reflect all the hazards of the product.

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing solids (Category 3), H272

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

2.2 GHS Label elements, including precautionary statements

Pictogram:

Signal Word: Warning

Hazard Statements:

H272	May intensify fire; oxidizer
H315	Causes skin irritation
H319	Causes serious eye irritation

Precautionary Statements:

P264	Wash skin thoroughly after handling
P280	Wear protective gloves / protective clothing / eye & face protection
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention
P337 + P313	If eye irritation persists: Get medical advice/ attention
P362	Take off contaminated clothing and wash before reuse
P501	Dispose of contents / container to an approved waste disposal plant.

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

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Component	CAS #	Hazard Classifications	Concentration
Water (H_2O)	7732-18-5	n/a	70 – 75 wt.%
Trade Secret (1)*	Proprietary	Ox. solid 3, H272; Eye irrit. 2A, H319; Skin irrit. 2, H315	15 – 20 wt.%
Trade Secret (2)*	Proprietary	Ox. solid 3, H272; Eye irrit. 2A, H319; Skin irrit. 2, H315	5 – 10 wt.%
Trade Secret (3)	Proprietary	n/a	< 1 wt.%

*Compound contains nitrates

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:

Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

After Skin Contact:

Rinse skin with copious amounts of water / shower. Seek medical attention if irritation develops.

After Eye Contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice / attention.

After Ingesting:

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a POISON CENTER or doctor/physician IF you feel unwell.

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 further information available

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable Extinguishing Media

Water only – do not use dry chemicals, carbon dioxide, halon, or foams

5.2 Special Hazards Arising from the Substance or Mixture

Nitrogen oxides (NOx), other oxides

5.3 Advice for Firefighters

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

5.4 Further Information

Not combustible but enhances combustion of other substances. Gives off irritating or toxic fumes (or gases) in a fire. Risk of fire and explosion on contact with reducing agents.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

Use personal protective equipment. Ensure adequate ventilation. Keep unprotected persons away. Eliminate sources of ignition or overheating. 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

Sweep spilled substance into plastic containers. Wash away remainder with plenty of water.

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. Provide good ventilation or extraction. Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapor or mist.

7.2 Conditions for Safe Storage (including any incompatibilities)

Keep container tightly sealed and store at room temperature (25 °C / 77 °F). Protect from extreme temperature variations. The solution should not be allowed to freeze or be heated above 60 °C / 140 °F. Keep separated from combustible substances and reducing agents (see Section 10 for all incompatibilities).

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	CAS #	Value	OSHA (OEL)	ACGIH (TLV)	NIOSH (REL)
*Trade Secret (2)	Proprietary	TWA	2.00 mg/m^3	2.00 mg/m3	2.00 mg/m3

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

Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Form: Liquid
Color: Greenish / Black
Odor: Acid-like odor
pH: 3 to 4

Melting point/range:	No Data Available
Specific Gravity:	No Data Available
Boiling Point:	~ 100 °C
Flashpoint:	No Data Available
Ignition Temperature:	No Data Available
Auto-ignition Temperature:	No Data Available
Lower Explosion Limit:	No Data Available
Upper Explosion Limit:	No Data Available
Vapor Pressure:	No Data Available
Vapor Density:	No Data Available
Water Solubility:	Very Soluble
Percent VOC's by weight:	No Data Available
Evaporation Rate:	No Data Available

9.2 Other Information

None

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

No Data Available

10.5 Incompatible Materials

Strong acids, strong bases, reducing agents, oxidizing agents, organic materials, combustible materials, powdered metals

10.6 Hazardous Decomposition Products

No Data Available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects (of components)

Acute Toxicity	**Trade Secret (1)**	**Trade Secret (2)**	**Trade Secret (3)**
Oral LD50:	5440 mg/kg (rat)	3671 mg/kg (rat)	No Data Available
Inhalation LC50:	No Data Available	No Data Available	No Data Available
Dermal LD50:	No Data Available	No Data Available	No Data Available
Skin corrosion/irritation			
	Skin – Rabbit: 500 mg / 24H Result: Mild irritation	No Data Available	No Data Available
Serious eye damage/eye irritation			
	Eyes – Rabbit: 500 mg / 24H Result: Mild irritation	No Data Available	No Data Available
Respiratory or skin sensitization			
	No Data Available	No Data Available	No Data Available
Germ cell mutagenicity			
	No Data Available	No Data Available	No Data Available

Carcinogenicity

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

ACGIH: No component of this product (present at levels greater than or equal to 0.1%) is identified as a carcinogen or potential carcinogen by ACGIH.

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

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

To the best of our knowledge, 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

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging

Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: TRANSPORT INFORMATION

14.1 Department of Transportation (DOT - US)

UN number: 1796 Class: 8 Packing Group: II

Proper Shipping Name: Nitrating acid mixture, 35%

14.2 International Maritime Dangerous Goods (IMDG)

UN number: 1796 Class: 8 Packing Group: II

Proper Shipping Name: Nitrating acid mixture, 35%

14.3 International Air Transport Association (IATA)

UN number: 1796 Class: 8 Packing Group: II

Proper Shipping Name: Nitrating acid mixture, 35%

14.4 Additional Transport Information

HS Code / Schedule B #: 2834.29.0000

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

The following components are subject to reporting levels established by SARA Title III, Section 313:

Component Name	CAS #
Trade Secret (2)	Proprietary

SARA 311/312 Hazards

Component Name	CAS #	Hazards
Trade Secret (1)	Proprietary	Reactivity Hazard, Chronic Health Hazard
Trade Secret (2)	Proprietary	Acute Health Hazard

The following product components are cited on the lists below:

Component	CAS #	List Citations
Trade Secret (1)	Proprietary	MA, NJ, PA Right to Know
Trade Secret (2)	Proprietary	NJ, PA Right to Know

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.

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:	0	Flammability Hazard:	0
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.