Safety Data Sheet
nanoShell™ Dielectric Enamel
Date of issue: 2/21/2018

Section 1: Manufacturer and Product Identification

Supplier/Distributor:
Truck-Lite Co., LLC
310 East Elmwood Avenue
Falconer, NY 14733

Manufacturer/ SDS Preparer:
NanoMech, Inc.
Springdale, Arkansas 72764
Phone: (479) 725-8003

Product Information:
nanoSealTM Dielectric Gel

Recommended Use:
Industrial Dielectric Lubricant

Emergency Phone:
1-800-424-9300

Section 2: Hazards Identification

Hazard Classification:

Health Hazards:

Flammable Liquids	Category 2
Aspiration Hazard	Category 1
Carcinogenicity	Category 2
Specific Target Organ Toxicity (Repeated Exposure)	Category 1
Germ Cell Mutagenicity	Category 1B
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 3

Warning Label Items:

Pictogram(s):

Signal Word(s):
DANGER

Hazard Statement(s):

Highly flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Suspected of causing cancer.
Causes damage to organs through prolonged or repeated exposure.
May cause genetic defects.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:

Keep away from heat/sparks/open flames/hot surfaces.-No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/eye protection/face protection.
Obatin special instructions before use.
Do not handle until all safety precuations have been read and understood.
Do not breathe dust/fumes/mist/vapors/spray.
Wash affected areas thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Avoid release to the environment.
Use only outdoors or in a well-ventilated area.

Response:

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: Use carbon dioxide, powder, or alcohol-resitant foam to extinguish.
If exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
If swallowed: Immediately call a poison center or doctor.
Do NOT induce vomiting.
Collect spillage.
If inhaled: remove mictim to fresh air and keep at rest in a position comfortable for breathing.
If skin irriation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.

Storage:

Store in a well-ventilated place. Keep cool.
Store locked up.

Disposal:

Dispose of contents/container in accordance with local regulations.

Hazards Not Otherwise Classified:
None

Percentage of Ingredients with Unknown Toxicity:
Zero

Section 3: Composition/Information on Ingredients[1]

	Chemical Identity	Concentration (%)
Component A	Modified Alkyd Resin Solution	30 – 50
Component B	Hydrotreated Light Naphtha	10 – 19
Component C	Zinc-Based Compound	8 – 15
Component D	Titanium Dioxide	5 – 10
Component E	Color Pigment	5 – 10
Component F	Barium Sulphate	4 – 10
Component G	Calcium Carbonate	4 – 10
Component H	Color Pigment	2 – 5
Component I	Synthetic Fluoropolymer	1 – 4
Component J	Organic Corrosion Inhibitor	1 – 3
Component K	Anti-Skinning Agent	0.1 – 0.2
Component L	Silica-Based Compound	0.1 – 0.5
Component M	Methanol	0.1 – 0.5
Component N	Zirconium Dryer	0.2 – 0.6
Component O	Cobalt Dryer	0.02 – 0.08

The specific chemical identities and exact percentages (concentrations) of the ingredients of the composition have been withheld as trade secrets.

Section 4: First-aid Measures

After inhalation:
Remove victim to fresh air. Keep warm and quiet. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. Get immediate medical attention.

After skin contact:
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

After eye contact:
Move individual away from exposure. Immediately flush eyes with large quantities of clean water for at least 15 minutes. Get medical attention if irritation develops or persists.

---

[1]The composition of nanoShell™ Dielectric Enamel (both component identities and percentages) is confidential to NanoMech, Inc. and should only be disclosed to company employees as needed to comply with OSHA's Hazard Communication Standard.

After ingestion:
Do not induce vomiting. Aspiration hazard. This material may enter the lungs during vomiting. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms/effects, acute and delayed:
May be fatal if swallowed and enters airways. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. Causes skin and eye irritation.
Immediate medical attention required:

If swallowed:
Immediately call a poison or doctor/physician. Do not induce vomiting.

Section 5: Fire-fighting Measures

Flammability:
Highly flammable liquid and vapor.

Means of Extinction:
Use carbon dioxide (CO^2), foam, dry chemical, water spray. Do not use a solid water stream as it may scatter and spread fire. Keep distance from the fire and the container.

Flashpoint (°C):
Not determined

Upper Flammability Limit (% by volume):
Not determined

Lower Flammability Limit (% by volume):
Not determined

Autoignition Temperature (°C):
Not determined

Explosion Data – Sensitivity to Impact:
Product is not explosive, however, vapors may form explosive mixtures with air.

Explosion Data – Sensitivity to Static Discharge:
Product is not explosive, however, formation of explosive air/vapor mixtures are possible.

Hazardous combustion products:
Carbon monoxide, carbon dioxide.

Protective equipment:
Wear self-contained respirator. Wear fully protective impervious suit.

Section 6: Accidental Release Measures

Small spills:
Contain and collect spillage with non-combustible, absorbent material (for example, sand, vermiculite, or diatomaceous earth) and place in container for disposal according to local regulations.

Large spills:
Enclose the spill area for later disposal.

Person related safety precautions:
Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Measures for environmental protection:
Prevent entry into environment (sewers, water, soil). Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:
Ensure adequate ventilation. Stop leak if without risk. Dispose of via a licensed waste disposal contractor.

Section 7: Handling and Storage

Handling
Information for safe handling:
Keep container tightly sealed. Slowly open the container. Ensure good ventilation at the workplace.

Storage
Requirements to be met by storerooms and receptacles:
Store in cool, dry place in tightly closed containers. Keep away from freezing. Protect material from direct sunlight. Keep away heat, sparks, and open flame. No smoking.

Information about storage in one common storage facility:
Store away from strong acids and oxidizing agents.

Section 8: Exposure Controls and Personal Protection

Chemical Identity	ACGIH TLV	OSHA PEL
Component A	20 ppm TWA	100 ppm TWA
Component B	No data	No data
Component C	10 mg/m3 TWA total dust*	5mg/m3 respirable dust*
Component D	10 mg/m3 TWA total dust*	15 mg/m3 TWA total dust*
Component E	No data	5 mg/m3 respirable dust* 15 mg/m3 TWA total dust*
Component F	10 mg/m3 TWA total dust*	15 mg/m3 TWA total dust*
Component G	10 mg/m3**	None
Component H	None	None
Component I	10 mg/m3 TWA total dust**	5 mg/m3 TWA respirable dust** 15 mg/m3 TWA total dust**
Component J	100 ppm TWA	100 ppm TWA
Component K	None	None
Component L	0.025 mg/m3 TWA*	0.1 mg/m3 TWA respirable*
Component M	200 ppm TWA	200 ppm TWA
Component N	100 ppm TWA	100 ppm TWA
Component O	100 ppm TWA	100 ppm TWA

*exposure limits are for dust. As long as this component is bound/mixed in the final product, exposure limits will not apply.

**as particulates not otherwise classified. As long as this component is bound/mixed in the final product, exposure limits will not apply.

Specific Engineering Controls:
Provide sufficient mechanical ventilation to maintain exposure below TLV(s). Overexposures to vapors and mists may be prevented by ensuring ventilation controls, local exhaust and/or fresh air entry.

Eye Protection:
Vapor tight chemical-type splash goggles should be worn when the possibility exists for eye contact due to splashing or spraying of liquid or the generation of airborne particles or vapors.

Skin Protection:
Wear protective clothing.

General Protective and Hygienic Measures:
The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Respiratory Protection:
Use NIOSH-approved respirator if there is potential to exceed exposure limits.

Protection of Hands:
Wear impervious gloves. Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Section 9: Physical and Chemical Properties

General Information

Physical state: Fluid (Liquid)
Color/Appearance: Red
Odor: Mild
Odor threshold: Not determined
Specific Gravity: Not determined
Vapor density: Not determined
Vapor pressure: Not determined
Evaporation rate: Not determined
Boiling point: Not determined
Freezing point: Not determined
pH: Not determined
Coefficient of Water/Oil Distribution: Not determined
Melting point/Melting range: Not determined
Sublimation temperature/start: Not determined
Flash point: Not determined
Ignition temperature: Not determined
Decomposition temperature: Not determined
Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
Flammability limits:
- **Lower:** Not determined
- **Upper:** Not determined

Solubility in/Miscibility with Water: Not determined
Viscosity: Not determined

Section 10: Stability and Reactivity

Reactivity:
Not reactive if used and stored according to specifications.

Chemical Stability:
Stable under normal conditions.

Possibility of Hazardous Reactions:
Dangerous reactions and decomposition will not occur if used and stored according to specifications.

Conditions to Avoid:
Keep away from freezing. Protect material from direct sunlight, open flames, hot surfaces, and sources of ignition. Store away from strong acids and oxidizing agents.

Incompatibility with Other Substances:
Strong acids and oxidizing agents.

Hazardous Decomposition Products:
Oxides of carbon, smoke, and irritating vapors.

Section 11: Toxicological Information

Effects of Acute Exposure:
Irritating to skin, eyes, and respiratory tract. May be fatal if swallowed and enters airways.

Effects of Chronic Exposure:
Prolonged or repeated contact may cause permanent central nervous system changes, kidney damage, and liver damage.

Irritancy of Product:
Irritating to skin, eyes, and respiratory tract.

Skin and Respiratory Sensitization:
No known sensitizing effects.

Carcinogenicity (NTP, IARC, ACGIH or OSHA):
Component A contains small concentration of ethylbenzene, which is classified as an IARC Group 2B and ACGIH Group A3 carcinogen. Component D contains titanium dioxide, which is classified as an IARC Group 2B carcinogen. Component J contains a mixture of xylene isomers, which are classified as an IARC Class 3 carcinogen. None of the remaining components are listed by NTP, IARC, ACGIH, or OSHA as a carcinogen.

Reproductive Toxicity:
No known reproductive effects.

Teratogenicity:
No known teratogenic effects.

Embryotoxicity:
No known embryotoxic effects.

Mutagenicity:
No known mutagenic effects.

Name of Synergistic Products/Effects:
None known.

Acute toxicity:

LD/LC50 values that are relevant for classification:
Oral: LD: Not Determined
Dermal: LD: Not Determined
Inhalative: LC50/4H: Not Determined

Section 12: Ecological Information

General notes:
Do not release material to the environment without proper governmental permits.

Section 13: Disposal Considerations

General notes:
Consult state, local or national regulations to ensure proper disposal. Disposal must be made according to official regulations.

Section 14: Transport Information

Special Shipping Information:

UN Number: UN1866

DOT regulations:

Proper Shipping Name: RESIN SOLUTION
Hazard Class: 3
Packing Group: II

Maritime transport IMDG:

Proper Shipping Name: RESIN SOLUTION
Hazard Class: 3
Packing Group: PG II

Air transport ICAO–TI and IATA–DGR:

Proper Shipping Name: RESIN SOLUTION
Hazard Class: 3
Packing Group: II

Transport/Additional information:
Keep separated from foodstuff.

Section 15: Regulatory Information

National Regulations:
All components of this product are listed on the TSCA Inventory or are exempt.

WHMIS Classification:
D2B – Toxic material causing other toxic effects.
B2 – Flammable liquid.

California Proposition 65:
WARNING: This material contains a chemical or chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

Information about limitation of use:
For use only by technically qualified individuals.

Section 16: Other Information

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.

Contact:
Mr. Wyatt Watkins
NanoMech, Inc.
2447 Technology Way
Springdale, Arkansas 72764
Phone: (479) 695-8100
Fax: (479) 756-9919
Email: nglide@nanomech.com
URL: www.nanomech.com

Revision History:
Original Document: 2/21/2018