


SAFETY DATA SHEET

Product:	Silver Nanowires Dispersed in Isopropanol AgNW-IPA-L AgNW-IPA-H
Distributor Address:	Nanotech Energy, Inc. 323 Sunny Isles Blvd, 7th Floor Sunny Isles Beach, FL 33160
Phone:	1 (800) 995-5491

Hazards Identification

Hazard Identification:	<ul style="list-style-type: none"> - Flammable Liquids - Eye irritation - Specific Target Organ Toxicity - Single Exposure, Central nervous system - Short-term (acute) aquatic hazard - Long-term (chronic) aquatic hazard 	
Hazard Statement(s)	<ul style="list-style-type: none"> - Highly flammable liquid and vapor. - May cause drowsiness or dizziness. - Induces serious eye irritation. - Toxic to aquatic life with long lasting effects. 	
Precautionary Statement(s)	<ul style="list-style-type: none"> - Keep away from heat, sparks, open flames and hot surfaces. - Keep container tightly closed. - Use in a well-ventilated area. - Use explosion-proof electrical / ventilating / lighting / equipment. - Use only non-sparking tools. - Wash skin meticulously after handling. - Avoid breathing dust / fume / gas / mist / vapors / spray. - Avoid release to the environment. - Wear personal protective equipment. - Skin Exposure: Wash thoroughly soap and water. - Eye Exposure: Rinse carefully with water for 15 minutes. Remove contact lenses if present. - In case of skin irritation: Get medical advice. - In case of persistent eye irritation: Get medical advice. - Remove contaminated clothing and wash. - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam. - Store in a cool and well-ventilated area. - Dispose of contents/container at an approved waste disposal plant. 	

Composition / information on ingredients

Component	Classification	Concentration
2-Propanol	Flam. Liq 2; Eye Irrit. 2A	97-100 %
Silver	Aquatic Acute 1; Aquatic Chronic 1	0.5-3.0 %

First Aid Measures

First Aid:	<p>General advice Consult a physician.</p> <p>If ingested Do NOT induce vomiting. Rinse mouth with water. Do NOT administer anything orally to an unconscious person. Consult a physician.</p> <p>In case of eye exposure Rinse eyes thoroughly with copious amounts of water for at least 15 minutes. Consult a physician.</p> <p>In case of skin exposure Wash meticulously with soap and water. Consult a physician.</p> <p>If inhaled Move person to a well-ventilated location. Consult a physician.</p>
Effects of Exposure:	<p>Ingestion May cause nausea, vomiting and/or diarrhea.</p> <p>Eyes Moderately irritating to the eyes: redness, itching, irritation and watering.</p> <p>Skin May be irritating to skin. May cause allergic skin reactions in sensitive individuals.</p> <p>Inhalation None expected.</p>

Firefighting Measures

Extinguishing Media	<p>Means of extinction Use dry powder or dry sand.</p> <p>Special hazards arising from the substance or mixture Not determined</p> <p>Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.</p>
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Accidental Release Measure

1	<p>Personal precautions, protective equipment and emergency procedures Use personal protective equipment such as protective gloves, protective clothing and eye protection. Avoid vapor, mist or gas inhalation. Ensure sufficient ventilation. Remove any source of ignition.</p>
2	<p>Environmental precautions Prevent further leakage if area is secure. Do not allow product to enter drains.</p>

3	<p>Methods and materials for containment and cleaning up Contain spillage and collect with a towel. Dispose in appropriate container for disposal according to local regulations.</p>
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Handling and Storage

1	<p>Precautions for safe handling Avoid skin / eye exposure. Avoid inhalation of vapor / mist. Keep away from sources of ignition – No smoking.</p>
2	<p>Conditions for safe storage Keep container upright and tightly closed in a dry and well-ventilated location. Open containers must be resealed and kept upright to prevent leakage. Store in a dark area and protect from sources of light. Recommended Temperature: 2-8 °C. Hygroscopic air and light sensitive. Storage class: Flammable liquids.</p>

Exposure Controls / Personal Protection

Ventilation:	Always provide adequate ventilation where this chemical / material is used.
Protective Gloves:	Neoprene, butyl, or nitrile rubber gloves
Eye Protection:	Safety glasses or goggles.
Skin Protection:	Suitable protective clothing.
Work / Hygiene Practices:	Avoid inhaling vapor. Avoid eye exposure. Wash hands after use.

Physical and Chemical Properties

Appearance	Form: liquid
Odor	Not determined
Odor Threshold	Not determined
pH	Not determined
Melting point / freezing point	Not determined
Initial boiling point and boiling range	Not determined
Flash Point	Not determined
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	Not determined
Vapor pressure	Not determined
Vapor density	Not determined
Relative density	Not determined
Partition coefficient	Not determined
Auto-ignition temperature	Not determined

Decomposition temperature	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidizing properties	Not determined

Stability and Reactivity

Reactivity:	Not determined
Chemical Stability:	Stable under recommended conditions.
Conditions to avoid:	Heat, flames and sparks
Incompatibility:	Utilize chemical segregation.

Toxicological information

Information on toxicological effects:	<p>Acute toxicity</p> <p>Skin corrosion / irritation 24h</p> <p>Serious eye damage / eye irritation May cause moderate eye irritation. May cause moderate corneal injury. Vapor may cause corneal injury</p> <p>Respiratory or skin sensitization Not determined</p> <p>Germ cell mutagenicity Not determined</p> <p>Carcinogenicity IARC: None at the reporting limit NTP: None at the reporting limit. OSHA: None at the reporting limit.</p> <p>Reproductive toxicity Not determined</p> <p>Specific target organ toxicity - single exposure May cause respiratory irritation</p> <p>Specific target organ toxicity - repeated exposure Not determined</p> <p>Aspiration hazard Not determined</p>
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Ecological Information

<p>Toxicity Toxicity to Fish</p> <p>Toxicity to daphnia and other aquatic invertebrates</p> <p>Toxicity to bacteria</p>	Not Determined
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Persistence and degradability	aerobic - Exposure time 5 d Result: 53 % - Readily biodegradable. (OECD Test Guideline 301E)
Bio accumulative potential	Not determined
Mobility in soil	Not determined
Results of PBT and vPvB assessment	Not applicable
Other adverse effect	Not determined

Disposal Considerations

Waste from residues / unused products:	Follow waste disposal requirements for your country, state, or local authorities.
Contaminated packaging:	Follow procedure for residues and unused product above.
Contaminated water:	Do not dispose of rinse water containing product in a sanitary sewer system or stormwater drainage system.

Regulatory Information

SARA 302 Components	None
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	Flammable (gases, aerosols, liquids, or solids) Serious eye damage or eye irritation
Massachusetts Right to know components	Isopropanol
Pennsylvania Right to Know Components	Isopropanol
New Jersey Right to Know Components	Isopropanol

The information provided is believed to be correct and should only be used as a guide. Information provided is based on present knowledge, it does not represent any guarantee of the properties of the product.