

Material Safety Data Sheet Product No. 610-50, -53, -56, -58, -60, -61, -63, -66, -69, -73, -76 Certified Latex Nanosphere 20, 50, 80, 100, 150, 200, 240, 350, 500, 600, 900 nm Issue Date (05-01-06) Review Date (04-12-12)

Section 1: Product and Company Identification Product Name: Certified Latex Nanosphere Synonym: Polymer Nanosphere Suspension Company Name Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477 Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST) International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST) Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP	IARC	OSHA regulated
Solid polymer microspheres composed of polystyrene (9003-53-6) OR Solid polymer microspheres composed polystyrene divinylbenzene (9003-70-7)	<0.1 – 10 (varies depending on product)	NE	NE	No	No	No
Water (7732-18-5)	90 – 99.9+	NE	NE	No	No	No
Dispersant/surfactant (Proprietary)	<0.5 (if any)	NE	NE	No	No	No
Preservative (Proprietary)	<0.5 (if any)	NE	NE	No	No	No

# Section 2: Composition / Information on Ingredients

NOTE: This MSDS addresses potential worker health and safety issues associated with the handling of the final product (i.e., during its transportation, distribution, and use). Occupational Exposure Limit: None established by OSHA, ACGIH or Ted Pella, Inc.

Section 3: Hazard Identification Emergency overview

Appearance: White or colorless liquid Immediate effects: Irritation.

# Potential health effects

Primary Routes of entry: Inhalation, accidental ingestion, skin or eye contact. Signs and Symptoms of Overexposure:

Eyes: If suspension contacts eye, may cause reversible irritation.

Skin: If suspension contacts skin, may cause reversible irritation.

Ingestion: ND

Inhalation: May cause lung irritation if inhaled.

Chronic Exposure: If inhaled in large quantities, may cause reversible lung irritation. Chemical Listed As Carcinogen Or Potential Carcinogen: Ingredients are not listed by

NTP, IARC or OSHA as carcinogens.

See Toxicological Information (Section11)

## Potential environmental effects

See Ecological Information (Section 12)

## Section 4: First Aid Measures

## If accidental overexposure is suspected

Eye(s) Contact: Wash thoroughly with water. If an irritation develops, seek medical advice.

Skin Contact: Wash thoroughly with soap and water. If an irritation develops, seek medical advice.

Inhalation: Remove to fresh air and seek medical advice.

Ingestion: Give one or two glasses of water and seek medical advice.

#### Note to physician

Treatment: ND

Medical Conditions generally Aggravated by Exposure: None known.

## Section 5: Fire Fighting Measures

Flash Point: NA Flammable Limits: Not considered flammable or explosive. Auto-ignition point: NA Fire Extinguishing Media: Use extinguishing media appropriate for surrounding fire (water, foam, vaporizing liquid or multipurpose dry chemical). Special Fire Fighting Procedures: ND Unusual Fire and Explosion Hazards: NA Hazardous combustion products: ND DOT Class: Not classified

## **Section 6: Accidental Release Measures**

Steps to be Taken in Case Material is Released or Spilled: Areas covered with spilled microspheres maybe be slippery. If material is spilled or released, barricade off the area. Collect material by wiping the spill area with paper towel or disposable wipe, and place materials into an appropriate container. Avoid inhaling fine particle dust. Discard collected material in containers suitable for proper disposal.

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

## Section 7: Handling and Storage

Precautions to be Taken in Handling and Storage: When creating aerosols of fine particles, use minimal and directional (away from the user) airflow. Keep tightly sealed to prevent contamination. Avoid damaging or puncturing containers.

Storage temperature: Between 4 °C to 30 °C unless otherwise specified on product label or literature.

Storage Pressure: ND

## Section 8: Exposure Controls / Personal Protection

#### **Engineering Controls**

Ventilation required: Use minimal and directional (away from user) airflow to minimize worker exposure.

#### **Personal Protection Equipment**

Respiratory protection: NIOSH approved filtering dust mask is recommended for dust and aerosol protection.

Protective gloves: Powder-free latex or vinyl gloves are suggested.

Skin protection: ND

Eye protection: Safety glasses with side shields are suggested.

Additional clothing and/or equipment: ND

#### **Exposure Guidelines**

See Composition/Information on Ingredients (Section2)

## **Section 9 Physical and Chemical Properties**

Appearance and Physical State: White or colorless liquid Odor (threshold): Odorless Specific Gravity (H<sub>2</sub>O=1): ND Vapor Pressure (mm Hg): Negligible Vapor Density (air=1): Negligible Polymer Density: 1.05 g/cm3 Suspension Density: 1.0 – 1.05 g/cm3 Percent Volatile by volume: Negligible

Evaporation Rate (butyl acetate=1): ND Boiling Point: 100 °C (as water) Freezing point / melting point: 0 °C (as water) pH: ND Solubility in Water: Microspheres are insoluble Molecular Weight: NA/Mixture

## Section 10: Stability and Reactivity

Stability: Stable Conditions to Avoid: ND Materials to Avoid (Incompatibility): Not known. Hazardous Decomposition Products: Not known. Hazardous Polymerization: Will not occur.

#### **Section 11: Toxicological Information**

Results of component toxicity test performed: ND Human experience: ND This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

#### Section 12: Ecological Information

Ecological Information: ND Chemical Fate Information: ND

## **Section 13 Disposal Considerations**

RCRA 40 CFR 261 Classification: All wastes containing the product should be specially contained, properly labeled, and stored separately from other facility waste discharges. Dispose of any waste residues according to prescribed federal, state, and local guidelines (e.g. to an appropriately permitted chemical waste incinerator). Rinse waters resulting from spill cleanups should be discharged in an environmentally safe manner (e.g., appropriately permitted municipal or on-site wastewater treatment facility or be collected for disposal according to prescribed federal, state and local guidelines). Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

## Section 14: Transportation Information

<u>US DOT Information</u>: Proper shipping name: Not classified <u>IATA</u>: Proper shipping name: Not classified <u>IMO</u>: Proper shipping name: Not classified Marine Pollutant: No Canadian TDG: Not classified

# Section 15: Regulatory Information United States Federal Regulations

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200. SARA: Not listed SARA Title III: Not listed RCRA: Not listed TSCA: Not listed CERCLA: Not listed **State Regulations** California Proposition 65: Not listed **International Regulations** Canada WHMIS: Materials in this product are listed on the CPR Inventory List. Europe EINECS Numbers: Water (7735-18-5): EINECS#: 231-791-2.

## Section 16: Other Information

Label Information: None European Risk and Safety Phrases: Not required. European symbols needed: ND Canadian WHMIS Symbols: ND Hazard Rating: Health: 0; Fire: 0; Reactivity: 0 (Estimated Hazard Rating) (0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme) **Abbreviations used in this document** NE= Not established NA= Not applicable NIF= No Information Found ND= No Data

#### Disclaimer

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

MSDS Form 0013F1 V2