Section 1: Information

1. Product Identification
   1.1. Name: Polystyrene Beads in a Trypan Blue Solution
   1.2. Catalog Numbers
      1.2.1. Polystyrene Beads in a Trypan Blue Solution at 5 x 10^6 beads/mL (5 µm), Cat. No: B05-02-050, 1mL
      1.2.2. Polystyrene Beads in a Trypan Blue Solution at 2 x 10^6 beads/mL (10 µm), Cat. No: B10-02-020, 1mL
      1.2.3. Polystyrene Beads in a Trypan Blue Solution at 1 x 10^6 beads/mL (15 µm), Cat. No: B15-02-010, 1mL
      1.2.4. Cellaca Bright field Beads
      Cat. No: CBB-016-2mL
      Cat. No: CFL2-019-1
   1.3. Supplier
      Nexcelom Bioscience, LLC.
      360 Merrimack St., Building 9
      Lawrence, MA 01843
         Phone Number: 1(978) 327-5340
         Hours of Operation: 9am-5pm EST
2. Recommended Use
   2.1. Polystyrene Beads in a Trypan Blue Solution should only be used as a calibration tool for testing functions of the Cellometer Image Cytometers
   2.2. Polystyrene Beads in a Trypan Blue Solution is not intended to be used as a human or animal diagnostic or therapeutic reagent, it is intended for research use only
   2.3. Do not use Polystyrene Beads in a Trypan Blue Solution for any other uses

Section 2: Hazard Identification

1. Hazard Classification
   1.1. H350 Carcinogenicity — Category: 1B
2. Label Elements
   2.1. Signal Words: — Danger
   2.2. Hazard Statements
      2.2.1. H350 — May cause cancer
   2.3. Precautionary Statements:
      2.3.1. P201 — Obtain special instructions before use
      2.3.2. P308 + P313 — If exposed or concerned: Get medical advice or attention
   2.4. Pictograms:
      2.4.1. 

2.5. Other Hazards Which Do Not Result in Classification

2.5.1. Restricted to professional users only

2.5.2. This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very Bioaccumulative (vPvB) at levelts of 0.1% or higher

2.5.3. To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated

2.5.4. Hazardous Material Information System USA

Health	0
Fire Hazard	0
Reactivity	0
Personal Protection	N/A

2.5.5. NFPA Rating (estimated)

Health	0
Flammability	0
Reactivity	0

Section 3: Composition and Information on Ingredients

1. Substances

1.1. Polystyrene micro particles are 1-30% solids suspended in the following

Common Name	Molecular Formula and Weight	CAS Number/IUPAC Name	EC-Number	Impurities and Stabilizers	Percentage
Water	H_2O (18.015 g/mol)	7732-18-5	231-791-2	Polystyrene micro particles	≥ 99 %
Trypan Blue	$C_{34}H_{24}N_6Na_4O_{14}S_4$ (960.81 g/mol)	72-57-1	200-786-7	Polystyrene micro particles	< 0.1 %

Section 4: First-aid Measures

1. Always remove contaminated personnel away from the hazardous area, and to a safe area
2. Most Important Symptoms and Effects
   2.1. No information available
3. Indication of Immediate Medical Attention or Necessary Special Treatment
   3.1. Consult a physician if there is any concern of exposure
4. Medical Professionals
   4.1. If medical advice or attention is required, present them with this safety data sheet first
   4.2. Notes to Physician: Treat symptomatically
5. Inhalation

5.1. Place affected person in fresh air and in a comfortable position for breathing
5.2. Inhalation of particles are dangerous and breathing may become problematic
5.3. Seek medical advice or attention

6. Skin Contact
   6.1. Remove any contaminated clothing from the affected person, and wash the contaminated area with soap and plenty of water for 15 minutes
      6.1.1. Wash clothes before re-use
   6.2. May cause skin irritation
   6.3. Seek medical advice or attention
7. Eye Contamination
   7.1. Flush open eyes for 15 minutes with water
   7.2. If contacts are present, remove contacts after the first 15-minute flush, and flush for an additional 15 minutes
   7.3. May cause eye irritation
   7.4. Seek medical advice or attention
8. Ingestion
   8.1. Do not induce vomiting
   8.2. Drink plenty of water
   8.3. Never give an unconscious person anything by mouth
   8.4. Seek medical advice or attention

Section 5: Fire-fighting Measures

1. Suitable Extinguishing Media
   1.1. Water spray
   1.2. Alcohol-resistant foam
   1.3. Dry chemical
   1.4. Carbon dioxide
2. Not Suitable Extinguishing Media
   2.1. No information available
3. Specific Hazards Arising from the Chemical
   3.1. No information available
4. Special Protective Actions for Fire-fighters
   4.1. Wear self-contained breathing apparatus for firefighting if necessary
5. Further Information
   5.1. No information available

Section 6: Accidental Release Measures

1. Personal Precautions
   1.1. Use proper personal protective equipment
   1.2. Minimize contact with skin and eyes
   1.3. Prevent inhalation of dust, vapors, mists, or gases
   1.4. Ensure proper ventilation

2. Protective Equipment
   2.1. Standard proper personal protective equipment is required
3. Emergency Procedures
   3.1. Evacuate personnel to safe areas should a problem occur
4. Accidental Spills or Release of the Product
   4.1. Wear proper protective equipment while cleaning up spills
   4.2. Remove ignition sources and provide adequate ventilation
   4.3. Contact emergency personnel if required
5. Emergency Responders
   5.1. Personal Protective Equipment
      5.1.1.See Section 5
6. Environmental Precautions
   6.1. Prevent further leakage or spillage if safe to do so
   6.2. Do not let product enter drains
7. Methods and Materials for Containment and Cleaning
   7.1. Drains
      7.1.1. Do not let product enter drains
   7.2. Capping procedures
      7.2.1. No information available
   7.3. Neutralization techniques
      7.3.1. No information available
   7.4. Decontamination techniques
      7.4.1. No information available
   7.5. Absorbent Materials
      7.5.1. Inert absorbent material – dispose of as hazardous waste
   7.6. Cleaning Techniques
      7.6.1. No information available
   7.7. Vacuuming Techniques
      7.7.1. No information available
   7.8. Special Equipment
      7.8.1. Keep in suitable, closed containers for disposal

Section 7: Handling and Storage

1. Safe Handling
   1.1. Avoid exposure – obtain special instructions before use
   1.2. Avoid inhalation of vapor or mists
2. Incompatible Substances
   2.1. No information available
3. Operations and Conditions to Avoid
   3.1. No information available
4. General Good Hygiene Practices
   4.1. No eating, drinking or smoking in work areas
   4.2. Wash hands after breaks and at the end of the work day

4.3. Remove contaminated clothing and protective equipment before entering eating areas

5. Conditions for Safe Storage
   5.1. Store in a cool place
   5.2. Keep container tightly closed and in a dry, well-ventilated place
   5.3. Open containers must be stored upright and opened slowly
   5.4. Conditions to avoid
      5.4.1. No information available
   5.5. Environmental Effects to avoid
      5.5.1. No information available
6. How to maintain product integrity
   6.1. No information available
7. Engineering Advice
   7.1. No information available

Section 8: Exposure Controls and Personal Protection

1. Occupational Exposure Limits
   1.1. American Conference of Government Industrial Hygienists (ACGIH)- No information available
   1.2. Threshold Limit Values (TLV)- No information available
   1.3. International Agency for Research on Cancer (IARC)- No information available
   1.4. National Toxicology Program (NTP)- No information available
2. Biological Limits
   2.1. No information available
3. Appropriate Engineering Controls
   3.1. Handle in accordance with good industrial hygiene and safety practices
4. Proper Personal Protective Equipment
   4.1. Always use good occupational hygiene practices
      4.1.1. Do not eat, drink, or smoke while using this product
      4.1.2. Wash hands before breaks and at the end of the work day
      4.1.3. Regularly clean equipment, work area, and clothing
   4.2. Eye and face protection
      4.2.1. Safety glasses with side-shields congruent to the requirements in EN166
      4.2.2. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)
   4.3. Skin protection
      4.3.1. Wear an appropriately fitting laboratory coat
      4.3.2. Handle with gloves conforming to specifications dictated in EU Directive 89/686/EEC and the standard EN 374 derived from it
         Full contact
            Material: Nitrile rubber
            Minimum layer thickness: 0.11 mm
            Break through time: 480 minutes

Material tested: Dermatril® (KCL 740/Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 408 minutes

Material tested: Dermatril® (KCL 740/Aldrich Z677272, Size M)

4.3.3. Use proper glove removal technique (without touching the glove's outer surface) to avoid skin contact with this product

4.3.4. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices

4.3.5. Wash and dry hands after every use

4.4. Respiratory Protection

4.4.1. No information available

4.5. Thermal Hazards

4.5.1. No information available

5. Special Equipment

5.1. No information available

5.2. Please prevent product from entering sewage systems

Section 9: Physical and Chemical Properties

Property	Data
Physical State	Liquid with solid particles in suspension
Color	No information available
Odor	No information available
Odor Threshold	No information available
Freezing Point	~ 0 °C (~ 32 °F)
Melting Point	~ 0 °C (~ 32 °F)
Boiling point or Initial Boiling Point/Range	~ 100 °C (~ 212 °F)
Flammability	No information available
Lower and Upper Explosion Limit/Flammability Limit	No information available
Flash Point	No information available
Auto-Ignition Temperature	No information available
Explosive properties	No information available
Decomposition Temperature	No information available
Oxidizing Properties	No information available
pH	No information available
Kinematic Viscosity	No information available
Solubility	Water soluble
Partition Coefficient n-octanol/water (Log value)	No information available

Vapor Pressure	~ 0.0313 atm (23.8 mm of mercury) at 25 °C (77 °F)
Density and/or Relative Density	No information available
Relative Vapor Density	No information available
Particle Characteristics	No information available
Evaporation Rate	No information available
Surface Tension	No information available

Section 10: Stability and Reactivity

1. Reactivity
   1.1. No information available
2. Chemical Stability
   2.1. Stable under recommended storage conditions
3. Possibility of Hazardous Reactions
   3.1. No information available
4. Conditions to avoid
   4.1. No information available
5. Incompatible Materials
   5.1. Strong oxidizing agents
6. Hazardous Decomposition Products
   6.1. Formed under fire conditions – No information available
   6.2. Other decomposition products – No information available
   6.3. In the event of a fire please reference Section 5

Section 11: Toxicological Information

1. Acute Toxicity
   1.1. No information available
2. Skin Corrosion/Irritation
   2.1. No information available
3. Serious Eye Damage/Irritation
   3.1. No information available
4. Respiratory or Skin Sensitization
   4.1. No information available
5. Germ Cell Mutagenicity
   5.1. No information available
6. Carcinogenicity
   6.1. IARC: Group 2B: Possibly carcinogenic to humans (Trypan Blue)
7. Reproductive Toxicity
   7.1. No information available
8. Specific Target Organ Toxicity- Single Exposure
   8.1. No information available
9. Specific Target Organ Toxicity – Repeated Exposure
   9.1. No information available

10. Aspiration Hazard
    10.1. No information available
11. Other Information
    11.1. Signs and symptoms of exposure: Exposed areas will be white or colored for dyed latex
    11.2. When water suspension is dried, the dust may be an irritant to sensitive people
    11.3. Registry of Toxic Effects of Chemical Substances: No information available
    11.4. To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated
    11.5. Liver – Irregularities: based on human evidence (Trypan Blue)

Section 12: Ecological Information

1. Ecotoxicity: May cause long lasting harmful effects to aquatic life
    1.1. Fish
        1.1.1. No information available
    1.2. Crustaceans
        1.2.1. No information available
    1.3. Algae
        1.3.1. No information available
    1.4. Other Aquatic Plants
        1.4.1. No information available
    1.5. Soil Micro- and Macro-Organisms
        1.5.1. No information available
    1.6. Birds
        1.6.1. No information available
    1.7. Bees
        1.7.1. No information available
    1.8. Plants
        1.8.1. No information available
    1.9. Inhibition of Micro-Organisms
        1.9.1. No information available
2. Persistence and Degradability
    2.1. No information available
3. Bioaccumulative Potential
    3.1. No information available
4. Mobility in Soil
    4.1. No information available
5. Other Adverse Effects
    5.1. Environmental Fate
        5.1.1. No information available
    5.2. Ozone Depletion Potential
        5.2.1. No information available
    5.3. Photochemical Ozone Creation Potential

5.3.1. No information available

5.4. Endocrine Disrupting Potential and/or Global Warming Potential

5.4.1. No information available

Section 13: Disposal Considerations

1. Disposal Methods
   1.1. Please take precautions to generate as little waste as possible while handling and using this product
   1.2. Do not dispose of contaminated materials in the sewage
   1.3. Packaging, containers, solutions and any material that may have come in contact with this product should be considered as hazardous as the product itself
   1.4. Disposal of this product and any of its by-products should be in compliance with all applicable local, regional and national/federal biological hazardous waste disposal regulations
2. Disposal Containers and methods
   2.1. See Section 6

Section 14: Transport Information

1. DOT (US)
   1.1. No information available

Section 15: Regulatory Information

1. States with Right to Know Components
   1.1. State Right to Know Components
      1.1.1. No information available
2. No regulatory information to report (29 CFR 1910.1200(g)(2))

Section 16: Other Information

1. Literary references
   1.1. No information available

Date Revised: 21, July 2021
Revision Number: D
1. Added Cellaca Brightfield Beads (CBB-016-2mL and CFL2-019-1)

END OF SDS