Section 1: Information

1. Product Identification
   1.1. Name: Polystyrene Beads in a Trypan Blue Solution
   1.2. C.A.S. Number: No information available
   1.3. Catalog Numbers
      1.3.1. Polystyrene Beads in a Trypan Blue Solution at 5 \times 10^6 beads/mL (5 \mu m), Cat. No: B05-02-050, 1mL
      1.3.2. Polystyrene Beads in a Trypan Blue Solution at 2 \times 10^6 beads/mL (10 \mu m), Cat. No: B10-02-020, 1mL
      1.3.3. Polystyrene Beads in a Trypan Blue Solution at 1 \times 10^6 beads/mL (15 \mu m), Cat. No: B15-02-010, 1mL
      1.3.4. Cellaca Brightfield Beads Cat. No: CB016-2mL Cat. No: CFL2-019-1
   1.4. Supplier
      Nexcelom Bioscience, LLC.  
      360 Merrimack St., Building 9  
      Lawrence, MA 01843  
      Phone Number: 1(978) 327-5340  
      Hours of Operation: 9am-5pm EST
      Nexcelom Bioscience, Ltd.
      Unit 5, Rutherford House  
      Pencroft Way,  
      Manchester Science Park  
      Manchester. M15 6SZ. UK  
      Phone Number: 0161-232-4592
   1.5. Emergency Number: Please contact the appropriate local emergency response provider
   1.6. R.E.A.C.H Registration Number: No registration number is given yet for the substance/substances in this mixture since the annual import quantity is less than the required one tonnage per annum

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 M- Factor: No information available

For the full text of H-Statements please reference Section 16
1.2. No information available

For the full text of R-phrases please reference Section 16
1.3. No information available  
For the full text of S-phrases please reference Section 16

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 levels 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  

Section 3: Composition and Information on Ingredients  
1. Substance: Trypan Blue  
1.1. Hazardous Component: Trypan Blue  
1.2. Synonyms  
1.2.1. Tetrasodium 3,3’-[(3,3’-dimethyl[1,1’-biphenyl]-4,4’-diyl]bis(azo)]bis[5-amino-4hydroxynaphthalene-2,7-disulphonate]  
1.3. Hazardous component molecular formula: C_{34}H_{24}N_{8}Na_{4}O_{14}S_{4}  
1.4. Hazardous component molecular weight: 960.81 g/mol
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
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. National Exposure Limits
   1.1. Substance: Trypan Blue
      1.1.1. CAS No. 72-57-1

<table>
<thead>
<tr>
<th>Country</th>
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<th>Short -Term Limits/Excursion Limits (STEL)</th>
<th>Biological Limit Value</th>
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<tr>
<td>United Kingdom</td>
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</table>

2. Appropriate Engineering Controls
   2.1. No information available

3. Exposure Controls
   3.1. Always use good occupational hygiene practices
      3.1.1. Do not eat, drink, or smoke while using this product
      3.1.2. Wash hands before breaks and at the end of the work day
3.1.3. Regularly clean equipment, work area, and clothing

3.2. Eye and face protection
   3.2.1. Safety glasses with side-shields congruent to the requirements in EN166
   3.2.2. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

3.3. Skin protection
   3.3.1. Wear an appropriately fitting laboratory coat
   3.3.2. 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)
   3.3.3. Use proper glove removal technique (without touching the glove’s outer surface) to avoid skin contact with this product
   3.3.4. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices
   3.3.5. Wash and dry hands after every use

3.4. Respiratory Protection
   3.4.1. No information available

3.5. Thermal Hazards
   3.5.1. No information available

4. Environmental Exposure Controls
   4.1. No information available
Section 9: Physical and Chemical Properties

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<thead>
<tr>
<th>Property</th>
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<td>Physical State</td>
<td>Liquid with solid particles in suspension</td>
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<td>Boiling point or Initial Boiling Point/Range</td>
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<td>~ 0.0313 atm (23.8 mm of mercury) at 25 °C (77 °F)</td>
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<td>Relative Vapor Density</td>
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<td>Surface Tension</td>
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</table>

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. Repeated Dose Toxicity
   5.1. No information available
6. Germ Cell Mutagenicity
   6.1. No information available
7. Carcinogenicity
   7.1. IARC: Group 2B: Possibly carcinogenic to humans (Trypan Blue)
8. Reproductive Toxicity
   8.1. No information available
9. Specific Target Organ Toxicity- Single Exposure
   9.1. No information available
10. Specific Target Organ Toxicity – Repeated Exposure
    10.1. No information available
11. Aspiration Hazard
    11.1. No information available
12. Likely Routes of Exposure
    12.1. No information available
13. Symptoms Related to Physical, Chemical, and Toxicological Characteristics
    13.1. No information available
14. Delayed and Immediate Effects
    14.1. Short Term Exposure
       14.1.1. No information available
    14.2. Long Term Exposure
       14.2.1. No information available
15. Interactive Effects
    15.1. No information available
16. Other Information
    16.1. Signs and symptoms of exposure: Exposed areas will be white or colored for dyed latex
    16.2. When water suspension is dried, the dust may be an irritant to sensitive people
16.3. Registry of Toxic Effects of Chemical Substances: No information available
16.4. To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated
16.5. 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
  1.10. Impact on Sewage Treatment Plants
  1.10.1. Reference Section 13
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.
   1.5. Offer surplus and non-recyclable solutions to a licensed disposal company.

Section 14: Transport Information

1. European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
   1.1. No information available.
2. Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)
   2.1. No information available.
3. European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)
   3.1. No information available.
4. UN Number: No information available.
5. UN Proper Shipping Name: No information available.
6. Transport Hazard Class: No information available.
7. Packing Group: No information available.
8. Environmental Hazards
   8.1. No
9. Special Precautions for the User
   9.1. No information available.
10. Transport in bulk according to Annex II of MARPOL 73/78
    10.1. Not applicable.
Section 15: Regulatory Information

1. Safety Regulations/Legislations
   1.1. REACH – Annex XVII: Tetrasodium 3,3’-[(3,3’-dimethyl[1,1’biphenyl]-4,4’-diyl]bis[azo]]bis[5amino-4-hydroxynaphthalene-2,7disulphoneate]
   1.2. Regulation (EC) No. 649/2012: Tetrasodium 3,3’-[(3,3’-dimethyl[1,1’biphenyl]-4,4’-diyl]bis[azo]]bis[5amino-4-hydroxynaphthalene-2,7disulphoneate]

2. Health Regulations/Legislations
   2.1. No information available

3. Environmental Regulations/Legislations
   3.1. No information available

4. Chemical Safety Assessment
   4.1. No information available

Section 16: Other Information

1. Literary references
   1.1. No information available
   1.2. H statements according to Regulation (EC) No. 1272/2008
       1.2.1. H350 May cause cancer
   1.3. R-phrases according to EU Directives 67/584/EEC or 1999/45/EC
       1.3.1. No information available

2. Methods of Evaluation
   2.1. In accordance with Article 9 (2.) of Regulation (EC) No. 1272/2008
   2.2. In accordance with Article 8 (3. B) of Regulation (EC) No. 1272/2008
   2.3. In accordance with Annex 1 (1.1.1) of Regulation (EC) No. 1272/2008
   2.4. In accordance with Annex XI (1.2) of Regulation (EC) No. 1907/2006

3. Training Advice
   3.1. Handle this product using standard precautionary laboratory practices, with effective engineering conditions and while wearing the proper protective equipment described in this safety data sheet
   3.2. Only use this product for research purposes and never as a diagnostic tool

Copyright 2019 Nexcelom Bioscience License: The above information is believed to be correct, but does not purport to be all inclusive, and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The SDS does not represent any guarantee of the properties of the product nor does it constitute a warranty for any particular purpose. Nexcelom Bioscience shall not be held liable for any damage resulting from handling or from contact with the above product.
Date Revised: 21, July 2021
Revision Number: D

1. Added Cellaca Brightfield Beads (CBB-016-2mL and CFL2-019-1)

END OF SDS