Section 1: Information

1. Product Identification
   1.1. Name: Annexin V Binding Buffer
   1.2. Catalog Number
      1.2.1. ViaStain™ Celigo Annexin V Binding Buffer Kit, Cat. No.: CSK-V0007-1, 10 mL
      1.2.2. ViaStain™ Celigo Annexin V Binding Buffer Kit, Cat. No.: CSK-V0007-S, 5 mL
   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

Nexcelom Bioscience, Ltd.
Unit 5, Rutherford House
Pencroft Way,
Manchester Science Park
Manchester. M15 6SZ. UK
Phone Number: 0161-232-4592

   1.4. Emergency Number: Please contact the appropriate local emergency response provider
   1.5. 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. Annexin V Binding Buffer should only be used as aqueous buffer solution containing HEPES, $CaCl_2$, and NaCl, PH 7.4.
   2.2. Annexin V Binding Buffer is not intended to be used as a human or animal diagnostic or as a therapeutic reagent, it is intended for research use only
   2.3. Do not use Annexin V Binding Buffer for any other purposes

Section 2: Hazard Identification

1. Hazard Classification
   1.1. No hazard classification to report
   1.2. No R-phrases to report
2. Label Elements
   2.1. Signal Words: None
   2.2. Hazard Statements: None
   2.3. Precautionary Statements: None
   2.4. Supplemental Hazard Statements: None
   2.5. Pictograms:
      2.5.1. None
   2.6. Other Hazards Which Do Not Result in Classification

2.6.1. None of the components are considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1 % or higher

Section 3: Composition and Information on Ingredients

1. Substance: HEPES
   1.1. Hazardous Component: No information available
   1.2. Synonyms
      1.2.1. No information available
   1.3. Hazardous component molecular formula: $C_8H_{18}N_2O_4S$
   1.4. Hazardous component molecular weight: 238.3012 g/mol
2. Substance: Calcium Chloride
   2.1. Hazardous Component: No information available
   2.2. Synonyms
   2.3. No information available
   2.4. Hazardous component molecular formula: $CaCl_2$
   2.5. Hazardous component molecular weight: 110.98g/mol
3. Substance: Sodium Chloride
   3.1. Hazardous Component: No information available
   3.2. Synonyms
   3.3. No information available
   3.4. Hazardous component molecular formula: NaCl
   3.5. Hazardous component molecular weight: 58.44 g/mol

Common Name	Classification	CAS Number/IUPAC Name	EC- Number	M-Factor	Percentage
HEPES	-	7365-45-9	-	-	Proprietary
Calcium Chloride	-	10043-52-4	-	-	Proprietary
Sodium Chloride	-	7647-14-5	-	-	Proprietary

Section 4: First-aid Measures

1. Most Important Symptoms and Effects
   1.1. No information available
   1.2. See Section 11
2. Indication of Immediate Medical Attention or Necessary Special Treatment

2.1. No information available
3. Indication of Immediate Medical Attention or Necessary Special Treatment
   3.1. No information available
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. No irritating effect known
6. Skin Contact
   6.1. No irritating effect known
7. Eye Contamination
   7.1. No irritating effect known
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 if irritation persists

Section 5: Fire-fighting Measures

1. Suitable Extinguishing Media
   1.1. Water
   1.2. Carbon dioxide
   1.3. Dry chemical powder
   1.4. Alcohol resistant foam
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 a self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes
5. Further Information
   5.1. None to report

Section 6: Accidental Release Measures

1. Personal Precautions
   1.1. Use proper personal protective equipment to clean up spills promptly
2. Protective Equipment
   2.1. Use standard personal protective equipment
3. Emergency Procedures

3.1. See Section 5
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. Use inert absorbent materials (e.g. sand, vermiculite)
   7.6. Cleaning Techniques
      7.6.1. Use inert absorbent materials (e.g. sand, vermiculite)
      7.6.2. For disposal see Section 13
   7.7. Vacuuming Techniques
      7.7.1. No information available
   7.8. Special Equipment
      7.8.1. No information available

Section 7: Handling and Storage

1. Safe Handling
   1.1. No information available
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 container tightly closed and in a dry, cool, and well-ventilated place
   5.2. Conditions to avoid
      5.2.1. No information available
   5.3. Environmental Effects to avoid
      5.3.1. 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

Country	TWA (8-hour weighted average)		Short -Term Limits/Excursion Limits (STEL)		Biological Limit Value
	ppm	mg/m^3	ppm	mg/m^3	
Austria	-	-	-	-	-
Belgium	-	-	-	-	-
Bulgaria	-	-	-	-	-
Croatia	-	-	-	-	-
Cyprus	-	-	-	-	-
Czech Republic	-	-	-	-	-
Denmark	-	-	-	-	-
Estonia	-	-	-	-	-
Finland	-	-	-	-	-
France	-	-	-	-	-
Germany	-	-	-	-	-
Greece	-	-	-	-	-
Hungary	-	-	-	-	-
Ireland	-	-	-	-	-
Italy	-	-	-	-	-
Latvia	-	-	-	-	-
Lithuania	-	-	-	-	-
Luxembourg	-	-	-	-	-
Malta	-	-	-	-	-
Netherlands	-	-	-	-	-
Poland	-	-	-	-	-
Portugal	-	-	-	-	-
Romania	-	-	-	-	-
Slovakia	-	-	-	-	-
Slovenia	-	-	-	-	-
Spain	-	-	-	-	-

Sweden	-	-	-	-	-
United Kingdom	-	-	-	-	-

2. Appropriate Engineering Controls
   2.1. Use adequate ventilation to keep exposures (airborne levels of dust, fume, vapor, etc) below recommended exposure limits
3. Exposure Controls
   3.1. Follow general industrial hygiene practices
4. Environmental Exposure Controls
   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. Follow safe laboratory practices
   4.3. Skin protection
      4.3.1. Follow safe laboratory practices
   4.4. Respiratory Protection
      4.4.1. Follow safe laboratory practices
   4.5. Thermal Hazards
      4.5.1. Follow safe laboratory practices
5. Special Equipment
   5.1. No information available

Section 9: Physical and Chemical Properties

Property	Data
Physical State	Liquid
Color	Clear
Odor	No information available
Odor Threshold	No information available
Freezing Point	No information available
Melting Point	No information available
Boiling point or Initial Boiling Point/Range	No information available
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
Viscosity	No information available
Solubility	No information available
Partition Coefficient n-octanol/water (Log value)	No information available
Vapor Pressure	No information available
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. No information available
6. Hazardous Decomposition Products
   6.1. Formed under fire: oxide of carbon
   6.2. Other decomposition products: No information available

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. No information available

8. Mutagenicity
   8.1. No information available
9. Reproductive Toxicity
   9.1. No information available
10. Specific Target Organ Toxicity- Single Exposure
    10.1.No information available
11. Specific Target Organ Toxicity – Repeated Exposure
    11.1.No information available
12. Aspiration Hazard
    12.1.No information available
13. Likely Routes of Exposure
    13.1.Skin
14. Symptoms Related to Physical, Chemical, and Toxicological Characteristics
    14.1.No information available
15. Delayed and Immediate Effects
    15.1.Short Term Exposure
        15.1.1. No information available
    15.2.Long Term Exposure
        15.2.1. No information available
16. Interactive Effects
    16.1.No information available
17. Other Information
    17.1.Registry of Toxic Effects of Chemical Substances
        17.1.1. None to report

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
1.1. Impact on Sewage Treatment Plants
1.1.1. See 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

Disposal Methods

1) Please take precautions to generate as little waste as possible while handling and using this product
2) Do not dispose of contaminated materials in the sewage
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
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

Disposal Containers and methods

1) See Section 6

Section 14: Transport Information

1. European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
1.1. Not available
2. Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)
2.1. Not available

3. European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)
   3.1. Not 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 information available
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
    10.2.International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code): Not applicable

Section 15: Regulatory Information

1. Safety Regulations/Legislations
   1.1. No information available
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 chemical safety assessment information is available

Section 16: Other Information

1. Literary references
   1.1. No information available
2. Methods of Evaluation
   2.1. No information available
3. Training Advice
   3.1. No information available

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END OF SDS