# SAFETY DATA SHEET

## 1. Identification

| | | |
|---|---|---|
| 1.1. | GHS product identifier | Cell Staining Buffer |
| | Product code | 2701005 |
| | Other means of identification | Not available. |
| | Product type | Liquid. |
| 1.2. | Relevant identified uses of the substance or mixture and uses advised against | |
| | Product use | Research. |
| | Area of application | Industrial applications. |
| 1.3. | Supplier<br>Address<br>Telephone, fax,<br>email | SONY BIOTECHNOLOGY INC.<br>1730 North First Street, San Jose, CA 95112 U.S.A.<br>Voice: +1 800-275-5963, FAX: +1 408-352-4130,<br>SBTcustomerservice@sonybiotechnology.com |
| 1.4. | e-mail address of person responsible for this SDS | SBTcustomerservice@sonybiotechnology.com |
| 1.5. | Emergency telephone number | US: +1 800-275-5963 (6:00AM – 5:30PM PT, M-F) |

## 2. Hazards Identification

| | | |
|---|---|---|
| 2.1. | OSHA/HCS status | While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |
| 2.2. | Classification of the substance or mixture | Not classified. |
| 2.3. | GHS Label elements | |
| | Signal word | No signal word. |
| | Hazard statements | No known significant effects or critical hazards. |
| 2.4. | Precautionary statements | |
| | Prevention | Not applicable. |
| | Response | Not applicable. |
| | Storage | Not applicable. |
| | Disposal | Not applicable. |
| 2.5. | Hazards not otherwise classified | None known. |

## 3. Composition/Information on Ingredients

| | | |
|---|---|---|
| 3.1. | Substance/mixture | Mixture |
| 3.2. | Other means of identification | Not available. |

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

## 4. First Aid Measures

4.1. Description of first aid measures

| | |
|---|---|
| Eye contact | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

4.2. Most important symptoms and effects, both acute and delayed

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|---|---|
| Potential acute health effects | |
| Eye contact | No known significant effects or critical hazards. |
| Inhalation | No known significant effects or critical hazards. |
| Skin contact | No known significant effects or critical hazards. |
| Ingestion | No known significant effects or critical hazards. |
| Over-exposure signs/symptoms | |
| Eye contact | No specific data. |
| Inhalation | No specific data. |
| Skin contact | No specific data. |
| Ingestion | No specific data. |
| Indication of immediate medical attention and special treatment needed, if necessary | |
| Notes to physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | No specific treatment. |
| Protection of first-aiders | No action shall be taken involving any personal risk or without suitable training. |

See toxicological information (Section 11)

## 5. Fire-Fighting Measures

5.1. Extinguishing media

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|---|---|
| Suitable extinguishing media | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | Do not use water jet. |

5.2. Specific hazards arising from the chemical — In a fire or if heated, a pressure increase will occur and the container may burst.

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| 5.3. Hazardous thermal decomposition products | No specific data. |
| 5.4. Special protective actions for fire-fighters | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| 5.5. Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

## 6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

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|---|---|
| For non-emergency personnel | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. |
| For emergency responders | If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| Environmental precautions | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |

6.2. Methods and materials for containment and cleaning up

| | |
|---|---|
| Small spill | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| Large spill | Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

## 7. Handling and Storage

7.1. Precautions for safe handling

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|---|---|
| Protective measures | Put on appropriate personal protective equipment (see Section 8). |
| Advice on general occupational hygiene | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| 7.2. Conditions for safe storage, including any incompatibilities | Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. |

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| Skin protection | |
| Hand protection | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Body protection | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection | Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |

## 9. Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

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|---|---|
| Appearance | |
| Physical state | Liquid. [Clear.] Colorless. to Yellow. [Light]] |
| Color | Not available. |
| Odor | Not available. |
| Odor threshold | 7.0-7.4 |
| pH | Not available. |
| Melting point | |
| Boiling point | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not applicable. |
| Flammability (solid, gas) | Not available. |
| Lower and upper explosive (flammable) limits | Not available. |

| | |
|---|---|
| Vapor pressure | Not applicable. |
| Vapor density | Not applicable. |
| Relative density | Not applicable. |
| Density | Not available. |
| Solubility | Easily soluble in the following materials: cold water and hot water. |
| Solubility in water | Not available. |
| Partition coefficient: n-octanol/water | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| SADT | Not available. |
| Viscosity | Not available. |
| Flow time (ISO 2431) | Not available. |

## 10. Stability and Reactivity

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|---|---|
| 10.1. Reactivity | No specific test data related to reactivity available for this product or its ingredients. |
| 10.2. Chemical stability | The product is stable. |
| 10.3. Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous polymerization will not occur. |
| 10.4. Conditions to avoid | Avoid high temperatures. Keep away from heat and direct sunlight. |
| 10.5. Incompatible materials | Reactive or incompatible with the following materials: oxidizing materials, reducing materials, acids and alkalis. |
| 10.6. Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## 11. Toxicological Information

11.1. Information on toxicological effects

| | |
|---|---|
| Acute toxicity | Not available. |
| Irritation/Corrosion | Not available. |
| Sensitization | Not available. |
| Mutagenicity Conclusion/Summary | Not available. |
| Carcinogenicity Conclusion/Summary | Not available. |
| Reproductive toxicity Conclusion/Summary | Not available. |
| Teratogenicity Conclusion/Summary | Not available. |
| Specific target organ toxicity (single exposure) | Not available. |
| Specific target organ toxicity (repeated exposure) | Not available. |
| Aspiration hazard | Not available. |
| Information on the likely routes of exposure | Not available. |

| | |
|---|---|
| Potential acute health effects | |
| Eye contact | No known significant effects or critical hazards. |
| Inhalation | No known significant effects or critical hazards. |
| Skin contact | No known significant effects or critical hazards. |
| Ingestion | No known significant effects or critical hazards. |
| 11.2. Symptoms related to the physical, chemical and toxicological characteristics | |
| Eye contact | No specific data. |
| Inhalation | No specific data. |
| Skin contact | No specific data. |
| Ingestion | No specific data.. |
| 11.3. Delayed and immediate effects and also chronic effects from short and long term exposure | |
| **Short term exposure**<br>Potential immediate effects<br>Potential delayed effects | <br>Not available.<br>Not available. |
| **Long term exposure**<br>Potential immediate effects<br>Potential delayed effects | <br>Not available.<br>Not available. |
| Potential chronic health effects | Not available. |
| General | No known significant effects or critical hazards. |
| Carcinogenicity | No known significant effects or critical hazards. |
| Mutagenicity | No known significant effects or critical hazards. |
| Teratogenicity | No known significant effects or critical hazards. |
| Developmental effects | No known significant effects or critical hazards. |
| Fertility effects | No known significant effects or critical hazards. |
| 11.4. Numerical measures of toxicity | |
| Acute toxicity estimates | Not available. |

## 12. Ecological Information

| | |
|---|---|
| 12.1. Toxicity | Not available. |
| 12.2. Persistence and degradability | Not available. |
| 12.3. Bioaccumulative potential | Not available. |
| 12.4. Mobility in soil<br>Soil/water partition coefficient (Koc) | Not available. |
| 12.5. Other adverse effects | No known significant effects or critical hazards. |

## 13. Disposal Considerations

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| Disposal methods | The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil,waterways, drains and sewers. |

## 14. Transport Information

| | DOT Classification | IMDG | IATA |
|---|---|---|---|
| UN number | Not regulated | Not regulated. | Not regulated. |
| UN proper shipping name | – | – | – |
| Transport hazard class(es) | – | – | – |
| Packing group | – | – | – |
| Environmental hazards | No. | No. | No. |
| Additional information | – | – | – |
| 14.1. Special precautions for user | Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. | | |
| 14.2. Transport in bulk according to Annex II of MARPOL and the IBC Code | Not available. | | |

## 15. Regulatory Information

15.1. US Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted.

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|---|---|
| Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) | Not listed |
| Clean Air Act Section 602 Class I Substances | Not listed |
| Clean Air Act Section 602 Class II Substances | Not listed |
| DEA List I Chemicals (Precursor Chemicals) | Not listed |
| DEA List II Chemicals (Essential Chemicals) | Not listed |

SARA 302/304
Composition/information on ingredients

| Name | % | EHS | SARA 302 TPQ | | SARA 304 RQ | |
|---|---|---|---|---|---|---|
| | | | (lbs) | (gallons) | (lbs) | (gallons) |
| Hydrogen Peroxide | ≤0.1 | Yes. | 1000 | 106.1 | 1000 | 106.1 |

| | |
|---|---|
| SARA 304 RQ | 3333333.3 lbs / 1513333.3 kg |
| SARA 311/312 Classification | Not applicable. |
| Composition/information on ingredients | No products were found. |
| SARA 313 | Not applicable. |
| 15.2. State Regulations | |
| Massachusetts | None of the components are listed. |
| New York | None of the components are listed. |
| New Jersey | None of the components are listed. |
| Pennsylvania | None of the components are listed. |
| California Prop. 65 | |
| 15.3. International regulations | |
| Chemical Weapon Convention List Schedules I, II & III Chemicals | Not listed. |
| Montreal Protocol (Annexes A, B, C, E) | Not listed. |
| Stockholm Convention on Persistent Organic Pollutants | Not listed. |
| Rotterdam Convention on Prior Informed Consent (PIC) | Not listed. |
| UNECE Aarhus Protocol on POPs and Heavy Metals | Not listed. |

## 16. Other Information

16.1. Hazardous Material Information System (U.S.A.)

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|---|---|
| Health | 0. |
| Flammability | 0 |
| Physical hazards | 0. |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

16.2. National Fire Protection Association (U.S.A.)

| | |
|---|---|
| Health | 0. |
| Flammability | 0 |
| Physical hazards | 0. |

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

16.3. Procedure used to derive the classification

| | |
|---|---|
| Classification | Comb. Dusts |
| Justification | |

16.4. History

| | |
|---|---|
| Date of issue/Date of revision | 03/30/2017 |
| Date of previous issue | 03/29/2017 |
| Version | 1.01 |
| Prepared by | Sphera Solutions |
| Key to abbreviations | ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Intermediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>UN = United Nations |
| References | HCS (U.S.A.)- Hazard Communication Standard<br>International transport regulations |

This SDS was created in good faith based on our current knowledge at the time of creation and revision, but no warranty is made on the information, hazards, and toxicity data described. Prior to use, be sure to examine the latest information, rules, laws, and regulations of your country or region concerning hazards and harmful effects as well as regarding equipment to be used, and accord the highest priority to them.

The precautions described in this document assume normal handling of the product. When handling the product in an unconventional manner, be sure to take appropriate safety measures according the situation and take sufficient precautions.

All chemical products should be handled assuming the presence of "unknown hazards and harmful effects" and with the knowledge that such hazards will vary greatly depending on the usage environment, handling method, and conditions and period of storage. All handling of the product, including use, unpacking, storage, and disposal, should be performed only by specialists with professional knowledge and experience or under close supervision of such qualified specialists.
It is the sole responsibility of the user to ensure and provide proper safe use conditions.



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