# SAFETY DATA SHEET

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| **1.** | **Identification** | |
| 1.1. | Product Name | Human Th17 Flow™ Kit (CD3 FITC/CD4 PE/IL-17 Alexa Fluor® 647) |
| | Catalog No. | 2297005 |
| 1.2. | Recommended Use | Research use only |
| 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 | In case of a chemical emergency, spill, fire, or exposure<br>US: +1 800-275-5963 (6:00AM – 5:30PM PT, M-F) |
| **2.** | **Hazards Identification** | |
| 2.1. | Hazard Classification | |
| | Skin Sensitization | Category 1 |
| | Serious Eye Damage | Category 1 |
| | Carcinogenicity | Category 2 |
| 2.2. | GHS Label elements, including precautionary statements | |
| | Pictogram |  |
| | Signal word | Danger |
| | Hazard statement | |
| | H317 | May cause an allergic skin reaction. |
| | H318 | Causes serious eye damage. |
| | H351 | Suspected of causing cancer. |
| | Precautionary statement (Prevention) | |
| | P201 | Obtain special instructions before use. |
| | P202 | Do not handle until all safety precautions have been read and understood. |
| | P261 | Avoid breathing dust/fume/gas/mist/vapors/spray. |
| | P264 | Wash thoroughly after handling. |
| | P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| | P272 | Contaminated work clothing should not be allowed out of the workplace. |

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| Precautionary Statements (Response) | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P310 | Immediately call a POISON CENTER or doctor/physician. |
| Precautionary Statements (Storage) | |
| P405 | Store locked up. |
| Precautionary Statements (Disposal) | |
| P501 | Dispose of contents/container to hazardous or special waste collection point. |

## 3. Composition/Information on Ingredients

3.1. Fixation Buffer

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| Component | Paraformaldehyde |
| CAS | 30525-89-4 |
| EINECS | unlisted |
| Concentration | 4% |

3.2. Anti-human IL-17 Alexa Fuor® 647/CD3 FITC/CD4 PE

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|---|---|
| Component | Sodium Azide |
| CAS | 26628-22-8 |
| EINECS | 247-852-1 |
| Concentration | 0.09% (w/v) |

3.3. Mouse IgG1, κ Isotype Control Alexa Fluor® 647/CD3 FITC/CD4 PE

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|---|---|
| Component | Sodium Azide |
| CAS | 26628-22-8 |
| EINECS | 247-852-1 |
| Concentration | 0.09% (w/v) |

3.4. Permeabilization Buffer

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|---|---|
| Component | Sodium Azide |
| CAS | 26628-22-8 |
| EINECS | 247-852-1 |
| Concentration | 0.09% (w/v) |

## 4. First Aid Measures

4.1. Description of necessary first aid measures

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| General Advice | Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. |

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| After inhalation | Move to fresh air. If not breathing, give artificial respiration. Consult a physician. |
| After skin contact | Wash with soap and copious amounts of water. Consult a physician. |
| After eye contact | Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Consult a physician. |
| After swallowing | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |
| Symptoms | Contact may cause skin irritation. Contact may cause eye irritation. |

## 5. Fire-Fighting Measures

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| 5.1. Suitable extinguishing agents | Extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. |
| 5.2. Special hazards caused by the material, its products of combustion or resulting gases | NFPA Class II Combustible Liquid. Dangerous decomposition products include poisonous gases or vapors; formaldehyde. Vapors can form explosive mixture with air. They may also travel to source of ignition. Containers exposed to fire/heat can explode due to pressure. Vapors are sensitive to static electrical discharge. |
| 5.3. Special protective equipment and precautions for fire-fighters | Wear protective clothing and self-contained breathing apparatus for fire response. Remove containers out of range of fire, if can be done without risk. If not, use water spray to keep containers cool. Any contaminated equipment should be rinsed thoroughly with water if exposed. |
| 5.4. Hazardous combustion products | No data available. |

## 6. Accidental Release Measures

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| 6.1. Personal precautions, protective equipment, and emergency procedures | Small spills can often be handled by personnel with chemical training. For large spills, contact emergency personnel immediately. Evacuate and ventilate area. Use protective clothing, gloves and equipment. Avoid formation of dust/vapor. Avoid inhalation or other contact. Keep unnecessary persons away. |
| 6.2. Environment precautions | Prevent entry into waterways, drains, soil, and sewers. |
| 6.3. Measures for cleaning/collecting | Absorb material with appropriate absorbent material and dispose in appropriate hazardous waste container. |
| 6.4. Additional information | See Section 7 for information on safe handling.<br>See Section 8 for information on personal protection equipment.<br>See Section 13 for disposal information. |

## 7. Handling and Storage

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| 7.1. Precautions for safe handling | Do not get on skin, in eyes, on clothing. Do not breathe dust/vapor. Wash thoroughly after handling. Ensure area is adequately ventilated. Toxigenic and mutagenic. See section 8 for more information. |
| 7.2. Conditions for safe storage, including any incompatibilities | Keep container tightly-sealed. Do not store with strong oxidizing agents, bases, acids, or any water reactive materials. |

## 8. Exposure Controls / Personal Protection

8.1. Exposure Limits

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| **Formaldehyde** | |
| OSHA PEL | 0.75 ppm over an 8-hour shift and 2 ppm during any 15-minute period. |
| NIOSH | REL is 0.016 ppm over an 8-hour shift and 2 ppm during any 15-minute period. |

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| ACGIH | TLV is 0.3 ppm. |
| IARC | Group 1 carcinogen. |
| NTP | Suspected carcinogen. |
| **Sodium Azide** | Suspected carcinogen. |
| ACGIH | TLV is 0.29 mg/m3 Ceiling |
| NIOSH | REL is 0.3 mg/m3 Ceiling |
| 8.2. Exposure Controls | |
| Engineering Controls | Use only with adequate (local exhaust) ventilation. |
| 8.3. Personal protective equipment | |
| General protective and hygienic measures | Keep away from foodstuffs, beverages, and feed.<br>Wash hands, face, and exposed forearms/areas after handling.<br>Wash contaminated clothing before reusing.<br>Ensure eyewash stations and safety showers are in close proximity to workstation. |
| Breathing equipment | May use self-contained breathing apparatus; NIOSH/MSHA-approved respirator. |
| Hand protection | Chemical resistant gloves. |
| Eye protection | Face shield (recommended) and safety goggles. |
| Body protection | Protective work clothing. |

## 9. Physical and Chemical Properties

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| Appearance | Liquid, Colorless, clear |
| Odor | Pungent, fruity |
| Odor threshold | No Data Available |
| pH | No Data Available |
| Melting point/freezing point | No Data Available |
| Boiling point | No Data Available |
| Flash point | No Data Available |
| Evaporation rate | No Data Available |
| Flammability | No Data Available |
| Upper explosion limit | No Data Available |
| Lower explosion limit | No Data Available |
| Vapor pressure | No Data Available |
| Vapor density | No Data Available |
| Relative density | No Data Available |
| Solubility | Soluble |
| Partition coefficient | No Data Available |
| Auto-ignition temperature | No Data Available |
| Decomposition temperature | No Data Available |
| Viscosity | No Data Available |
| Explosive Properties | No Data Available |
| Oxidizing Properties | No Data Available |

## 10. Stability and Reactivity

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| 10.1. Reactivity | No data available |
| 10.2. Chemical stability | Stable when stored under normal ambient and anticipated storage and handling conditions of temperature and pressure. |
| 10.3. Possibility of hazardous reactions | No data available. |

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| 10.4. Conditions to avoid | Avoid excessive heat. |
| 10.5. Incompatible materials | Strong oxidizing agents, bases, acids, or any water reactive materials. |
| 10.6. Hazardous decomposition products | Dangerous decomposition products include poisonous gases or vapors; formaldehyde. |
| **11. Toxicological Information** | |
| 11.1. Information on toxicological effects | |
| Routes of Entry | Ingestion, inhalation, skin and eye contact. |
| Acute Toxicity | Oral LD50 (Paraformaldehyde) 800 mg/kg (rat)<br>Oral LD50 (Sodium Azide) 27 mg/kg (rat) |
| Skin Corrosion/Irritation | Irritant |
| Serious eye damage/irritation | Irritant |
| Respiratory or skin sensitization | Irritant |
| Germ cell mutagenicity | Mutagenic effects possible from formaldehyde, the decomposition product of formaldehyde. |
| Carcinogenicity | Paraformaldehyde is a suspected carcinogen. |
| Reproductive toxicity | Reproductive effects possible from paraformaldehyde, the decomposition products of paraformaldehyde. |
| STOT-single exposure | No data available |
| STOT-repeated exposure | No data available |
| Aspiration hazard | No data available |
| 11.2. Potential health effects | |
| Inhalation: | May be toxic in inhaled. Causes respiratory tract irritation. |
| Ingestion | Harmful if swallowed. |
| Skin | Harmful if absorbed through skin. Causes skin irritation. |
| Eyes | Causes eye irritation. |
| 11.3 Signs and Symptoms of Exposure | May cause irreversible eye damage. |
| **12. Ecological Information** | |
| 12.1. Environmental Toxicity | In large volumes, may be harmful to terrestrial life. |
| 12.2. Aquatic Toxicity | In large volumes, may be harmful to aquatic life. |
| 12.3. Persistence and degradabilityl | Formaldehyde can transfer to rain and water due to solubility. Biodegrades significantly in water within days. |
| 12.4. Bioaccumulative potential | No data available |
| 12.5. Mobility in soil | Water soluble |
| 12.4. Results of PBT and vPvT assessment | No data available |
| **13. Disposal Considerations** | |
| 13.1. Disposal methods | Minimize waste as much as possible. Not a RCRA hazardous waste. Disposal must be made according to state and federal regulations. |

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| 13.2. Contaminated packaging (recommended) | Disposal must be made according to state and federal regulations. |
| 13.3. Cleaning agent (recommended) | If product is spilled or leaked, collect on absorbent |
| **14. Transport Information** | |
| DOT (Ground) | Not regulated |
| IMDG | Not regulated |
| IATA | Not regulated |
| ADR | Not regulated |
| ADN | Not regulated |
| RID | Not regulated |
| **15. Regulatory Information** | |
| 15.1. Product related hazard information | SARA Section 335 (extremely hazardous substances): Sodium azide and formaldehyde, the decomposition product of paraformaldehyde, is subject to reporting requirements.<br><br>SARA Section 313 (specific toxic chemical listing): Sodium azide and formaldehyde, the decomposition product of paraformaldehyde, is subject to reporting requirements. Acute health hazards.<br><br>TSCA (Toxic Substances Control Act): Sodium azide and formaldehyde, the decomposition product of paraformaldehyde, is subject to reporting requirements. Acute health hazards. |
| Paraformaldehyde | Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. |
| Sodium Azide | CERCLA Reportable Quantity: 1000 lbs |
| Formaldehyde | CERCLA Reportable Quantity: 100 lbs California Proposition 65: Formaldehyde is a known carcinogen. |
| **16. Other Information** | |
| Revision Date | May 5, 2015 |

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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