Kit Summary

Product Cat #: X1327K1,2,3

Product name BrdU Cell Proliferation ELISA Kit (colorimetric)

Kit Components:

500x BrdU Reagent

| Chemical Name | EC-No | CAS-No | Weight % | Classification (Reg. 1272/2008) | REACH Registration Number |
|-------------------|-----------|------------|----------|---------------------------------|---------------------------------|
| Sodium hydroxide | 215-185-5 | 1310-73-2 | 40 | Skin Corr. 1A (H314) | No data available |
| Bromodeoxyuridine | 200-415-9 | 51432-32-7 | 3.87 | | No data available |

Fixative/Denaturing Solution (Solution may contain slight precipitation and very light to light yellow coloring may occur.)

| Chemical Name | EC-No | CAS-No | Weight % | Classification (Reg. 1272/2008) | REACH Registration Number |
|------------------|-----------|-----------|----------|---|---------------------------------|
| Ethanol | 200-578-6 | 64-17-5 | 60 | Eye Irrit. 2 (H319) Flam Liq. 2 (H225) | No data available |
| Sodium hydroxide | 215-185-5 | 1310-73-2 | 40 | Skin Corr. 1A (H314) | No data available |

Prediluted anti-BrdU Detector Antibody

| Chemical Name | EC-No | CAS-No | Weight % | Classification (Reg. 1272/2008) | REACH Registration Number |
|---------------|-------|--------|----------|---------------------------------|---------------------------------|



| Triton-X-100 | 629-375-4 | 9002-93-1 | 0.1 | Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Aquatic Chronic 2 (H411) | No data available |
|-------------------|-----------|-----------|-------|---|----------------------|
| 2-Chloroacetamide | 201-174-2 | 79-07-2 | 0.005 | Acute Tox. 3 (H301) Skin Sens. 1 (H317) Repr. 2 (H361f) | No data available |

ELISA Conjugate Diluent

| Chemical Name | EC-No | CAS-No | Weight % | Classification (Reg. 1272/2008) | REACH Registration Number |
|-------------------|-----------|---------|----------|---|---------------------------------|
| 2-Chloroacetamide | 201-174-2 | 79-07-2 | 0.005 | Acute Tox. 3 (H301) Skin Sens. 1 (H317) Repr. 2 (H361f) | No data available |

50X Tris/Tween Plate Wash Concentrate

| Chemical Name | EC-No | CAS-No | Weight % | Classification (Reg. 1272/2008) | REACH Registration Number |
|---------------|-----------|-----------|----------|---------------------------------|---------------------------------|
| Tris HCl | 214-684-5 | 1185-53-1 | 0.79 | | No data available |
| Tris | 201-064-4 | 77-86-1 | 0.605 | | No data available |

ELISA Stop Solution

| Chemical Name | EC-No | CAS-No | Weight % | Classification (Reg. 1272/2008) | REACH Registration Number |
|----------------|-----------|-----------|----------|---------------------------------|---------------------------------|
| Sulphuric acid | 231-639-5 | 7664-93-9 | 24.5 | Skin Corr. 1A (H314) | No data available |

TMB Substrate

| Chemical Name | EC-No | CAS-No | Weight % | Classification (Reg. 1272/2008) | REACH Registration Number |
|--------------------------------------|-----------|------------|----------|---|---------------------------------|
| TMB (3,3',5,5'-tetramethylbenzidine) | 259-364-6 | 54827-17-7 | 1.2 | STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) | No data available |

GHS / CLP - GHS - Classification





Signal Word

Danger

Hazard statements

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

H225 - Highly flammable liquid and vapor.

Precautionary Statements - EU (§28, 1272/2008)

P310 - Immediately call a POISON CENTER or doctor/physician.

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P370 + P378 - In case of fire: Use foam for extinction.

P280 - Wear protective gloves/ eye protection/ face protection.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.

P233 - Keep container tightly closed.

2.3 Other information

A safety datasheet follows for all potentially hazardous components – all other components are non-hazardous.

TRANSPORT INFORMATION



DOT Excepted Quantity

Proper shipping name Chemical Kit **Hazard class**9 Miscellaneous

UN/ID No 3316 Packing group II

IATA Excepted Quantity

UN/ID No 3316

Proper shipping name Chemical Kit **Hazard class** 9 Miscellaneous

Packing group II

ADR Excepted Quantity

Proper shipping name Chemical Kit

Hazard class 9 Miscellaneous

UN/ID No 3316 Packing group II

Safety Data Sheet

Section 1: Product and Company Identification

Product Name: 500x BrdU Reagent

Part Number: J0012

Kit Catalog Number: X1327K1, X1327K2, X1327K3 Kit Product Name: BrdU Cell Proliferation Assay Kit

Recommended use: For research use only

Manufacturer: Exalpha Biologicals, Inc 2 Shaker Road, Unit B101 Shirley, MA 01464 (978) 425-1370 (U.S.A.)

Emergency Telephone Numbers: Contact National Poison Information Center

Section 2. Hazards Identification

GHS-Classification

| Skin corrosion/irritation | Category 1 |
|-----------------------------------|------------|
| Serious eve damage/eve irritation | Category 1 |

GHS Label elements, including precautionary statements **Signal Word**

Danger

Hazard statements

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.



Precautionary Statements - EU (§28, 1272/2008)

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.



P264 - Wash face, hands and any exposed skin thoroughly after handling.

P280 - Wear protective gloves/ eye protection/ face protection.

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.

Other information

No information available.

Section 3. Composition/Information on Ingredients

3.1 Substances

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|-------------------|------------|-------------|---------------------------------|
| Sodium hydroxide | 1310-73-2 | 30-60 | Skin Corr. 1A (H314) |
| Bromodeoxyuridine | 51432-32-7 | 1-5 | |

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First Aid Measure

General advice: Immediate medical attention is required.

Eve contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Inhalation: Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediate medical attention is required.

Notes to physician: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

Protection of first-aiders: Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Section 5. Fire Fighting Measures

Flammable properties: Not flammable.

Flash point: not determined

Suitable extinguishing media: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Explosion Data None

Sensitivity to Mechanical Impact: None. Sensitivity to Static Discharge None.



Specific hazards arising from the chemical: The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

Personal precautions: Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

Environmental precautions: Try to prevent the material from entering drains or water courses.

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water. **Other information:** Refer to protective measures listed in sections 7 and 8.

Section 7. Handling & Storage

Advice on safe handling: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.

Technical measures/Storage conditions: Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers.

Section 8. Exposure Controls and Personal Protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------------|------------------------------|---------------------------------|---------------------------------------|
| Sodium hydroxide 1310-73-2 | Ceiling: 2 mg/m ³ | TWA: 2 mg/m³ (vacated) Ceiling: | IDLH: 10 mg/m ³ Ceiling: 2 |
| | | 2 mg/m^3 | mg/m³ |

Other Exposure Guidelines: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering measures: Showers, Eyewash stations, Ventilation systems.

Personal protective equipment

Eye/face protection: Tightly fitting safety goggles. Face-shield.

Skin and body protection: No special protective equipment required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be



allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. For environmental protection, remove and wash all contaminated protective equipment before re-use. Wear suitable gloves and eye/face protection.

Section 9. Physical and Chemical Properties

Appearance: No information available. **Odor Threshold:** No information available.

pH: No information available.

Flash point: No information available.

Decomposition temperature: No information available.

Melting point/range: No information available. **Explosion limits:** No information available.

Specific Gravity: No data available.

Evaporation rate: No information available.

Vapor density: No data available. **Odor:** No information available.

Physical State at 20°C: No information available. **Autoignition temperature:** No information available. **Boiling point/boiling range:** No information available. Flammability Limits in Air: No information available.

solubility: No information available.

Vapor Pressure at 20°C (kPa): No information available.

VOC Content (%): Not applicable

Section 10. Stability and reactivity

Stability: Stable under recommended storage conditions.

Incompatible products: Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Conditions to avoid: Exposure to air or moisture over prolonged periods.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous polymerization: Hazardous polymerization does not occur.

Section 11. Toxicological Information

Acute toxicity

Product Information: Corrosive to skin, eyes and/or respiratory tract.

Inhalation: Corrosive by inhalation. Causes burns. **Eve contact:** Causes burns. Corrosive to eyes.

Skin contact: Corrosive. Causes burns.

Ingestion: Causes burns.

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|----------------------|-----------|-------------------------|-----------------|
| Sodium hydroxide | | 1350 mg/kg (Rabbit) | |

Chronic toxicity: Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw



necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risks of irreversible effects. **Target Organ Effects:** Eyes. Respiratory system. Skin.

Section 12. Ecological Information

Ecotoxicity: The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|------------------|-------------------|--|----------------------------|---|
| Sodium hydroxide | | 45.4: 96 h Oncorhynchus mykiss mg/L LC50 static | | |

Section 13. Disposal Considerations

Waste disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging: Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|------------------|-----------------------------------|
| Sodium hydroxide | Toxic Corrosive |

Section 14. Transport Information

DOT Not dangerous goods.

IATA Not dangerous goods.

ADR Not dangerous goods.

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard yes

Chronic Health Hazard yes

Fire Hazard no

Sudden Release of Pressure Hazard no

Reactive Hazard no

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical Name CWA - Reportable | CWA - Toxic | CWA - Priority | CWA - Hazardous |
|--------------------------------|-------------|----------------|-----------------|
|--------------------------------|-------------|----------------|-----------------|



| | Quantities | Pollutants | Pollutants | Substances |
|------------------|------------|------------|------------|------------|
| Sodium hydroxide | 1000 lb | | | X |

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|---------------------|-----------------------------|---------------------------------------|--|
| Sodium hydroxide | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|------------------|---------------|------------|--------------|----------|--------------|
| Sodium hydroxide | X | X | X | | X |

International Regulations

| Chemical Name | Carcinogen Status | Exposure limits |
|------------------|-------------------|--|
| Sodium hydroxide | | Mexico: Ceiling 2 mg/m ³ |

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other information

Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage

Hazard statements

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Version 3

Revision Date 03 Oct 2019

Revision Note No information available.

Disclaimer:

Exalpha Biologicals, Inc provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Exalpha Biologicals, Inc. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, Exalpha Biologicals, Inc. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

Prepared by: Exalpha Biologicals, Inc Phone Number: 978-425-1370 (U.S.A.)

Safety Data Sheet

Section 1: Product and Company Identification

Product Name: Fixative/Denaturing Solution (Solution may contain slight precipitation and very light to

light yellow coloring may occur.)

Part Number: J0013

Kit Catalog Number: X1327K1, X1327K2, X1327K3 Kit Product Name: BrdU Cell Proliferation Assay Kit

Recommended use: For research use only

Manufacturer: Exalpha Biologicals, Inc 2 Shaker Road, Unit B101 Shirley, MA 01464

(978) 425-1370 (U.S.A.)

Emergency Telephone Numbers: Contact National Poison Information Center

Section 2. Hazards Identification

GHS-Classification

| Acute dermal toxicity | Category 4 |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 1 |
| Serious eye damage/eye irritation | Category 1 |
| Ozono | Not |
| Ozone | applicable |
| Flammable liquids | Category 2 |

GHS Label elements, including precautionary statements

Signal Word: Danger



Hazard statements

H312 - Harmful in contact with skin.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

H225 - Highly flammable liquid and vapor.

Precautionary Statements - EU (§28, 1272/2008)



P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P370 + P378 - In case of fire: Use foam for extinction.

P280 - Wear protective gloves/ eye protection/ face protection.

P363 - Wash contaminated clothing before reuse.

P501 - Dispose of contents/ container to an approved waste disposal plant.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P405 - Store locked up.

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 - Keep container tightly closed.

P403 + P235 - Store in a well-ventilated place. Keep cool.

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.

Other information

No information available.

Section 3. Composition/Information on Ingredients

3.1 Substances

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|------------------|-----------|----------|--|
| Ethanol | 64-17-5 | 40-70 | Eye Irrit. 2 (H319) Flam Liq. 2 (H225) |
| Sodium hydroxide | 1310-73-2 | 30-60 | Skin Corr. 1A (H314) |

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First Aid Measure

General advice: If symptoms persist, call a physician. Immediate medical attention is required.

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. Immediate medical attention is required.

Inhalation: Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediate medical attention is required.

Notes to physician: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

Protection of first-aiders: Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Section 5. Fire Fighting Measures

Flammable properties: HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.

Flash point: not determined.

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact: None. Sensitivity to Static Discharge: None.

Specific hazards arising from the chemical: The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

Personal precautions: Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

Environmental precautions: Try to prevent the material from entering drains or water courses.

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Take up mechanically and collect in suitable container for disposal. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.

Other information: Refer to protective measures listed in sections 7 and 8.

Section 7. Handling & Storage

Advice on safe handling: Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.

Technical measures/Storage conditions: Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Section 8. Exposure Controls and Personal Protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------------|------------------------------|---------------------------------------|-------------------------------------|
| | | TWA: 1000 ppm TWA: 1900 | IDLH: 3300 ppm TWA: |
| Ethanol 64-17-5 | STEL: 1000 ppm | mg/m³(vacated) TWA: 1000 ppm | 1000 ppm TWA: 1900 |
| | | (vacated) TWA: 1900 mg/m ³ | mg/m ³ |
| Sodium hydroxide 1310-73- | Ceiling: 2 mg/m ³ | TWA: 2 mg/m³ (vacated) Ceiling: 2 | IDLH: 10 mg/m ³ Ceiling: |
| 2 | Cennig. 2 mg/m ³ | mg/m^3 | 2 mg/m^3 |



Other Exposure Guidelines: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering measures: Showers, Eyewash stations, Ventilation systems.

Personal protective equipment

Eye/face protection: Tightly fitting safety goggles. Face-shield. **Skin and body protection:** No special protective equipment required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. For environmental protection, remove and wash all contaminated protective equipment before re-use. Wear suitable gloves and eye/face protection.

Section 9. Physical and Chemical Properties

Appearance: No information available. **Odor Threshold:** No information available.

pH: No information available.

Flash point: No information available.

Decomposition temperature: No information available.

Melting point/range: No information available. **Explosion limits:** No information available.

Specific Gravity: No data available.

Evaporation rate: No information available.

Vapor density: No data available. **Odor:** No information available.

Physical State at 20°C: No information available. **Autoignition temperature:** No information available. Boiling point/boiling range: No information available. Flammability Limits in Air: No information available.

Solubility: No information available.

Vapor Pressure at 20°C (kPa): No information available.

VOC Content (%) 60

Section 10. Stability and reactivity

Stability: Stable under recommended storage conditions.

Incompatible products: Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Conditions to avoid: Exposure to air or moisture over prolonged periods.

Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous polymerization: Hazardous polymerization does not occur.

Section 11. Toxicological Information

Acute toxicity:

Product Information: Corrosive to skin, eyes and/or respiratory tract. Product is harmful by skin contact.

Inhalation: Corrosive by inhalation. Causes burns. **Eye contact:** Causes burns. Corrosive to eyes.

Skin contact: Harmful in contact with skin. Corrosive Causes burns.

Ingestion: Causes burns.

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------------|--------------------|---------------------|------------------------|
| Ethanol | 7060 mg/kg (Rat) | | 124.7 mg/L (Rat) 4 h |
| Sodium hydroxide | | 1350 mg/kg (Rabbit) | |

Chronic toxicity: Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common.

Gastrointestinal disturbances may also be seen. Avoid repeated exposure Possible risks of irreversible effects. May cause adverse liver effects Contains a known or suspected reproductive toxin.

Carcinogenicity: This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|------------------|-------|------|-------|------|
| Ethanol | A3 | | Known | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Target Organ Effects Blood. Central nervous system (CNS). Eyes. Liver. Reproductive System. Respiratory system. Skin.

Section 12. Ecological Information

Ecotoxicity: The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|------------------|-------------------|---|----------------------------|---|
| Ethanol | | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through | | 9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static |
| Sodium | | 45.4: 96 h Oncorhynchus mykiss | | |

T: (978) 425-1370

E: info@exalpha.com W: www.exalpha.com

| hydroxide | n | ng/L LC50 static | |
|-------------|-----|------------------|---------|
| Chemical Na | ame | | log Pow |
| Ethanol | | | -0.32 |

Section 13. Disposal Considerations

Waste disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging: Do not re-use empty containers.

| Chemical Name | California Hazardous Waste Status | |
|------------------|-----------------------------------|--|
| Ethanol | Toxic Ignitable | |
| Sodium hydroxide | Toxic Corrosive | |

Section 14. Transport Information

DOT Not dangerous goods.

IATA Not dangerous goods.

ADR Not dangerous goods.

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard yes

Chronic Health Hazard yes

Fire Hazard no

Sudden Release of Pressure Hazard no

Reactive Hazard no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical Name | CWA - Reportable | CWA - Toxic | CWA - Priority | CWA - Hazardous |
|------------------|------------------|-------------|----------------|-----------------|
| | Quantities | Pollutants | Pollutants | Substances |
| Sodium hydroxide | 1000 lb | | | X |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting



requirements at the local, regional, or state level pertaining to releases of this material.

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|---------------------|-----------------------------|---------------------------------------|---|
| Sodium hydroxide | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

| Chemical Name | CAS-No | California Prop. 65 |
|---------------|---------|--------------------------|
| Ethanol | 64-17-5 | Carcinogen Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|------------------|---------------|------------|--------------|----------|--------------|
| Ethanol | X | X | X | | X |
| Sodium hydroxide | X | X | X | | X |

International Regulations

| Chemical Name | Carcinogen Status | Exposure limits |
|------------------|----------------------|---|
| Ethanol | | Mexico: TWA 1000 ppm Mexico: TWA 1900 mg/m ³ |
| Sodium hydroxide | | Mexico: Ceiling 2 mg/m ³ |

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other information

Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage.

H225 - Highly flammable liquid and vapor.

Hazard statements

H312 - Harmful in contact with skin.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

H225 - Highly flammable liquid and vapor.

Version 3

Revision Date 03 Oct 2019

Revision Note No information available.

Disclaimer:

Exalpha Biologicals, Inc provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Exalpha Biologicals, Inc. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, Exalpha Biologicals, Inc. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

Prepared by: Exalpha Biologicals, Inc Phone Number: 978-425-1370 (U.S.A.)

Safety Data Sheet

Section 1: Product and Company Identification

Product Name: Prediluted Anti-BrdU Detector Antibody

Part Number: J0014

Kit Catalog Number: X1327K1, X1327K2, X1327K3 Kit Product Name: BrdU Cell Proliferation Assay Kit

Recommended use: For research use only

Manufacturer: Emergency Telephone Numbers:

Exalpha Biologicals, Inc Contact National Poison Information Center

2 Shaker Road, Unit B101

Shirley, MA 01464

(978) 425-1370 (U.S.A.)

Section 2. Hazards Identification

GHS- Classification

| Ozono | Not |
|-------|------------|
| Ozone | applicable |

GHS Label elements, including precautionary statements

Not dangerous

Other information

No information available

Section 3. Composition/Information on Ingredients

3.1 Substances

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|----------------------|-----------|----------|---|
| Triton-X-100 | 9002-93-1 | 0.1-1 | Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Aquatic Chronic 2 (H411) |
| 2-Chloroacetamide | 79-07-2 | <0.1 | Acute Tox. 3 (H301) Skin Sens. 1 (H317) Repr. 2 (H361f) |

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First Aid Measure

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.



Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation: Move to fresh air.

Ingestion: Clean mouth with water. Drink plenty of water.

Notes to physician: Treat symptomatically.

Section 5. Fire Fighting Measures

Flammable properties: Not flammable.

Flash point: not determined.

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact: None. Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

Personal precautions: Ensure adequate ventilation.

Environmental precautions: Try to prevent the material from entering drains or water courses.

Methods for containment: Prevent further leakage or spillage if safe to do so. **Methods for cleaning up:** Pick up and transfer to properly labeled containers.

Section 7. Handling & Storage

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8. Exposure Controls and Personal Protection

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering measures: Showers, Eyewash stations, Ventilation systems.

Personal protective equipment

Eve/face protection: No special protective equipment required.

Skin and body protection: No special protective equipment required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and Chemical Properties

Appearance: No information available.



Odor Threshold: No information available.

pH: No information available.

Flash point: No information available.

Decomposition temperature: No information available.

Melting point/range: No information available. Explosion limits: No information available.

Specific Gravity: No data available.

Evaporation rate: No information available.

Vapor density: No data available. **Odor:** No information available.

Physical State at 20°C: No information available. Autoignition temperature: No information available. Boiling point/boiling range: No information available. Flammability Limits in Air: No information available.

solubility: No information available.

Vapor Pressure at 20°C (kPa): No information available.

VOC Content (%): Not applicable.

Section 10. Stability and reactivity

Stability: Stable under recommended storage conditions.

Incompatible products: None known based on information supplied. **Conditions to avoid:** None known based on information supplied.

Hazardous decomposition products: None known based on information supplied.

Hazardous polymerization: Hazardous polymerization does not occur.

Section 11. Toxicological Information

Acute toxicity

Product Information: Product does not present an acute toxicity hazard based on known or supplied

information.

Chronic toxicity

Target Organ Effects: None known.

Section 12. Ecological Information

Ecotoxicity: The environmental impact of this product has not been fully investigated.

| Chemical Name | log Pow |
|-------------------|---------|
| 2-Chloroacetamide | -0.53 |

Section 13. Disposal Considerations

Waste disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging: Do not re-use empty containers.

Section 14. Transport Information

DOT: Not dangerous goods. **IATA:** Not dangerous goods. **ADR:** Not dangerous goods.

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard no Chronic Health Hazard no

Fire Hazard no

Sudden Release of Pressure Hazard no

Reactive Hazard no

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

International Regulations

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other information

None

Version 3

Revision Date 03 Oct 2019

Revision Note No information available.

Disclaimer:

Exalpha Biologicals, Inc provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Exalpha Biologicals, Inc. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, Exalpha Biologicals, Inc. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

Prepared by: Exalpha Biologicals, Inc Phone Number: 978-425-1370 (U.S.A.)

Safety Data Sheet

Section 1: Product and Company Identification

Product Name: ELISA Conjugate Diluent

Part Number: J0004

Kit Catalog Number: X1327K1, X1327K2, X1327K3 Kit Product Name: BrdU Cell Proliferation Assay Kit

Recommended use: For research use only

Manufacturer: Exalpha Biologicals, Inc

2 Shaker Road, Unit B101

Shirley, MA 01464

(978) 425-1370 (U.S.A.)

Emergency Telephone Numbers:

Contact National Poison Information Center

Section 2. Hazards Identification

GHS-Classification

| 0=0=0 | Not |
|-------|------------|
| Ozone | applicable |

GHS Label elements, including precautionary statements

Not dangerous

Other information

No information available

Section 3. Composition/Information on Ingredients

3.1 Substances

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|-------------------|---------|-------------|---|
| 2-Chloroacetamide | 79-07-2 | <0.1 | Acute Tox. 3 (H301) Skin Sens. 1 (H317) Repr. 2 (H361f) |

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First Aid Measure

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.



Inhalation: Move to fresh air.

Ingestion: Clean mouth with water. Drink plenty of water.

Notes to physician: Treat symptomatically.

Section 5. Fire Fighting Measures

Flammable properties: Not flammable.

Flash point: not determined.

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact: None. **Sensitivity to Static Discharge:** None.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

Personal precautions: Ensure adequate ventilation.

Environmental precautions: Try to prevent the material from entering drains or water courses.

Methods for containment: Prevent further leakage or spillage if safe to do so. **Methods for cleaning up:** Pick up and transfer to properly labeled containers.

Section 7. Handling & Storage

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8. Exposure Controls and Personal Protection

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure

limits established by the region specific regulatory bodies.

Engineering measures: Showers, Eyewash stations, Ventilation systems.

Personal protective equipment

Eye/face protection: No special protective equipment required.

Skin and body protection: No special protective equipment required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and Chemical Properties

Appearance: No information available. **Odor Threshold:** No information available.



pH: No information available.

Flash point: No information available.

Decomposition temperature: No information available.

Melting point/range: No information available. **Explosion limits:** No information available.

Specific Gravity: No data available.

Evaporation rate: No information available.

Vapor density: No data available. **Odor:** No information available.

Physical State at 20°C: No information available. **Autoignition temperature:** No information available. **Boiling point/boiling range:** No information available. Flammability Limits in Air: No information available.

Solubility Vapor Pressure at 20°C (kPa): No information available.

VOC Content (%): Not applicable.

Section 10. Stability and reactivity

Stability: Stable under recommended storage conditions.

Incompatible products: None known based on information supplied. Conditions to avoid: None known based on information supplied.

Hazardous decomposition products: None known based on information supplied.

Hazardous polymerization: Hazardous polymerization does not occur.

Section 11. Toxicological Information

Acute toxicity

Product Information: Product does not present an acute toxicity hazard based on known or supplied

information. **Chronic toxicity**

Target Organ Effects: None known.

Section 12. Ecological Information

Ecotoxicity: The environmental impact of this product has not been fully investigated.

| Chemical Name | log Pow |
|-------------------|---------|
| 2-Chloroacetamide | -0.53 |

Section 13. Disposal Considerations

Waste disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging: Do not re-use empty containers.



Section 14. Transport Information

DOT: Not dangerous goods. **IATA:** Not dangerous goods. **ADR:** Not dangerous goods.

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard no

Chronic Health Hazard no

Fire Hazard no

Sudden Release of Pressure Hazard no

Reactive Hazard no

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

International Regulations

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other information

None

Version 3

Revision Date 03 Oct 2019

Revision Note No information available.



Disclaimer:

Prepared by: Exalpha Biologicals, Inc Phone Number: 978-425-1370 (U.S.A.)

Safety Data Sheet

Section 1: Product and Company Identification

Product Name: 50x Tris/Tween Plate Wash Concentrate

Part Number: J0007

Kit Catalog Number: X1327K1, X1327K2, X1327K3 Kit Product Name: BrdU Cell Proliferation Assay Kit

Recommended use: For research use only

Manufacturer: Emergency Telephone Numbers:

Contact National Poison Information Center Exalpha Biologicals, Inc

2 Shaker Road, Unit B101 Shirley, MA 01464

(978) 425-1370 (U.S.A.)

Section 2. Hazards Identification

GHS-Classification

| _ | Not |
|-------|------------|
| Ozone | applicable |

GHS Label elements, including precautionary statements

Not dangerous

Other information

No information available

Section 3. Composition/Information on Ingredients

3.1 Substances

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|---------------|-----------|----------|---------------------------------|
| Tris HCl | 1185-53-1 | 0.1-1 | |
| Tris | 77-86-1 | 0.1-1 | |

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First Aid Measure

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes



and shoes.

Inhalation: Move to fresh air.

Ingestion: Clean mouth with water. Drink plenty of water.

Notes to physician: Treat symptomatically.

Section 5. Fire Fighting Measures

Flammable properties: Not flammable.

Flash point: not determined.

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact: None. Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

Personal precautions: Ensure adequate ventilation.

Environmental precautions: Try to prevent the material from entering drains or water courses.

Methods for containment: Prevent further leakage or spillage if safe to do so **Methods for cleaning up:** Pick up and transfer to properly labeled containers.

Section 7. Handling & Storage

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8. Exposure Controls and Personal Protection

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering measures: Showers, Eyewash stations, Ventilation systems.

Personal protective equipment

Eye/face protection: No special protective equipment required.

Skin and body protection: No special protective equipment required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.



Section 9. Physical and Chemical Properties

Appearance: No information available. **Odor Threshold:** No information available.

pH: No information available.

Flash point: No information available.

Decomposition temperature: No information available.

Melting point/range: No information available. **Explosion limits:** No information available.

Specific Gravity: No data available.

Evaporation rate: No information available.

Vapor density: No data available. **Odor:** No information available.

Physical State at 20°C: No information available. **Autoignition temperature:** No information available. **Boiling point/boiling range:** No information available. Flammability Limits in Air: No information available.

solubility: No information available.

Vapor Pressure at 20°C (kPa): No information available.

VOC Content (%): Not applicable.

Section 10. Stability and reactivity

Stability: Stable under recommended storage conditions.

Incompatible products: None known based on information supplied. **Conditions to avoid:** None known based on information supplied.

Hazardous decomposition products: None known based on information supplied.

Hazardous polymerization: Hazardous polymerization does not occur.

Section 11. Toxicological Information

Acute toxicity

Product Information: Product does not present an acute toxicity hazard based on known or supplied

information. **Chronic toxicity**

Target Organ Effects: None known.

Section 12. Ecological Information

Ecotoxicity: The environmental impact of this product has not been fully investigated.

Section 13. Disposal Considerations

Waste disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult



the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging: Do not re-use empty containers.

California Hazardous Waste Codes: 561

Section 14. Transport Information

DOT: Not dangerous goods. **IATA:** Not dangerous goods. **ADR:** Not dangerous goods.

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard no Chronic Health Hazard no

Fire Hazard no

Sudden Release of Pressure Hazard no

Reactive Hazard no

Clean Water Act This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

International Regulations

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other information

None

Version 3

Revision Date 03 Oct 2019

Revision Note No information available.

Disclaimer:

Exalpha Biologicals, Inc provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Exalpha Biologicals, Inc. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, Exalpha Biologicals, Inc. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

Prepared by: Exalpha Biologicals, Inc Phone Number: 978-425-1370 (U.S.A.)

Safety Data Sheet

Section 1: Product and Company Identification

Product Name: ELISA Stop Solution

Part Number: J0010

Kit Catalog Number: X1327K1, X1327K2, X1327K3 Kit Product Name: BrdU Cell Proliferation Assay Kit

Recommended use: For research use only

Manufacturer: Exalpha Biologicals, Inc

2 Shaker Road, Unit B101 Shirley, MA 01464

(978) 425-1370 (U.S.A.)

Emergency Telephone Numbers:

Contact National Poison Information Center

Section 2. Hazards Identification

GHS-Classification

| Skin corrosion/irritation | Category 1 |
|-----------------------------------|------------|
| Serious eye damage/eye irritation | Category 1 |
| Ozono | Not |
| Ozone | applicable |

GHS Label elements, including precautionary statements



Signal Word

Danger

Hazard statements

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P280 - Wear protective gloves/ eye protection/ face protection.

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P363 - Wash contaminated clothing before reuse.



P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.

Other information

No information available.

Section 3. Composition/Information on Ingredients

3.1 Substances

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|----------------------|-----------|----------|---------------------------------|
| Sulphuric acid | 7664-93-9 | 10-30 | Skin Corr. 1A (H314) |

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First Aid Measure

General advice: Immediate medical attention is required.

Eve contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Inhalation: Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediate medical attention is required.

Notes to physician: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

Protection of first-aiders: Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Section 5. Fire Fighting Measures

Flammable properties: Not flammable.

Flash point: not determined

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact: None. Sensitivity to Static Discharge: None.

Specific hazards arising from the chemical: The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

Personal precautions: Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

Environmental precautions: Try to prevent the material from entering drains or water courses.

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.

Other information: Refer to protective measures listed in sections 7 and 8.

Section 7. Handling & Storage

Advice on safe handling: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.

Technical measures/Storage conditions: Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Section 8. Exposure Controls and Personal Protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------|----------------------------------|-------------------------------------|---|
| Sulphuric acid 7664-93-9 | TWA: 0.2 mg/m³ thoracic fraction | TWA: 1 mg/m³ (vacated) TWA: 1 mg/m³ | IDLH: 15 mg/m ³ TWA: 1 mg/m ³ |

Other Exposure Guidelines: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering measures: Showers, Eyewash stations, Ventilation systems.

Personal protective equipment

Eye/face protection: Tightly fitting safety goggles. Face-shield.

Skin and body protection: No special protective equipment required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. For environmental protection, remove and wash all contaminated protective

equipment before re-use. Wear suitable gloves and eye/face protection.

Section 9. Physical and Chemical Properties

Appearance: No information available. **Odor Threshold:** No information available.

pH: No information available.

Flash point: No information available.

Decomposition temperature: No information available.

Melting point/range: No information available. Explosion limits: No information available.

Specific Gravity: No data available.

Evaporation rate: No information available.

Vapor density: No data available. **Odor:** No information available.

Physical State at 20°C: No information available. Autoignition temperature: No information available. Boiling point/boiling range: No information available. Flammability Limits in Air: No information available.

solubility: No information available.

Vapor Pressure at 20°C (kPa): No information available.

VOC Content(%):Not applicable.

Section 10. Stability and reactivity

Stability: Stable under recommended storage conditions.

Incompatible products: Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Conditions to avoid: Exposure to air or moisture over prolonged periods.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous polymerization: Hazardous polymerization does not occur.

Section 11. Toxicological Information

Acute toxicity

Product Information: Toxic by inhalation, in contact with skin and/or if swallowed Corrosive to skin, eyes

and/or respiratory tract.

Inhalation: Toxic by inhalation Corrosive by inhalation Causes burns. **Eve contact:** Avoid contact with eyes Causes burns Corrosive to eyes.

Skin contact: Corrosive Causes burns.

Ingestion: Toxic if swallowed Causes burns.

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|----------------------|--------------------|-------------|---|
| Sulphuric acid | 2140 mg/kg (Rat) | | 510 mg/m ³ (Rat) 2 h 347 ppm (Rat) 1 h |

Chronic toxicity: Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common.

Gastrointestinal disturbances may also be seen Avoid repeated exposure. Possible risks of irreversible effects.

Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. This product contains one or more



substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|------------------|-------|---------|-------|------|
| Sulphuric acid | A2 | Group 1 | Known | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Target Organ Effects Eyes. Respiratory system. Skin. Teeth.

Section 12. Ecological Information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|----------------|-------------------|--|----------------------------|---|
| Sulphuric acid | | 500: 96 h Brachydanio rerio mg/L LC50 static | | 29: 24 h Daphnia magna mg/L EC50 |

Section 13. Disposal Considerations

Waste disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging: Do not re-use empty containers

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|----------------|-----------------------------------|
| Sulphuric acid | Toxic Corrosive |

Section 14. Transport Information

DOT Not dangerous goods.

IATA Not dangerous goods.

ADR Not dangerous goods.

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | CAS-No | Weight % | SARA 313 - Threshold Values % |
|----------------|-----------|----------|-------------------------------|
| Sulphuric acid | 7664-93-9 | 24.5 | 1.0 |

SARA 311/312 Hazard Categories

Acute Health Hazard yes

Chronic Health Hazard yes

Fire Hazard no

Sudden Release of Pressure Hazard no

Reactive Hazard no

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical Name | CWA - Reportable | CWA - Toxic | CWA - Priority | CWA - Hazardous |
|----------------|------------------|-------------|----------------|-----------------|
| | Quantities | Pollutants | Pollutants | Substances |
| Sulphuric acid | 1000 lb | | | X |

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|----------------------|-----------------------------|---------------------------------------|--|
| Sulphuric acid | 1000 lb | 1000 lb | RQ 1000 lb final RQ RQ 454 kg final RQ |

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

| Chemical Name | CAS-No | California Prop. 65 |
|----------------|-----------|---------------------|
| Sulphuric acid | 7664-93-9 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|----------------|---------------|------------|--------------|----------|--------------|
| Sulphuric acid | X | X | X | X | X |

International Regulations

| Chemical Name | Carcinogen Status | Exposure limits |
|----------------|-------------------|------------------------|
| Sulphuric acid | A2 | Mexico: TWA 1 |

T: (978) 425-1370

E: info@exalpha.com W: www.exalpha.com

 mg/m^3

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other information

Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage.

Hazard statements

H314 - Causes severe skin burns and eye damage. [SEP]

H318 - Causes serious eye damage. [SEP]

Version 3

Revision Date 03 Oct 2019

Revision Note No information available.

Disclaimer:

Exalpha Biologicals, Inc provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Exalpha Biologicals, Inc. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, Exalpha Biologicals, Inc. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

Prepared by: Exalpha Biologicals, Inc Phone Number: 978-425-1370 (U.S.A.)

Safety Data Sheet

Section 1: Product and Company Identification

Product Name: TMB Substrate

Part Number: J0005

Kit Catalog Number: X1327K1, X1327K2, X1327K3 Kit Product Name: BrdU Cell Proliferation Assay Kit

Recommended use: For research use only

Manufacturer: Exalpha Biologicals, Inc

2 Shaker Road, Unit B101 Shirley, MA 01464

(978) 425-1370 (U.S.A.)

Emergency Telephone Numbers:

Contact National Poison Information Center

Section 2. Hazards Identification

GHS-Classification

| Ozone | Not applicable |
|-------|----------------|

GHS Label elements, including precautionary statements

Not dangerous.

Other information

No information available.

Section 3. Composition/Information on Ingredients

3.1 Substances

For the full text of the H-Statements mentioned in this Section, see Section 16

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|--------------------------------------|------------|----------|--|
| TMB (3,3',5,5'-tetramethylbenzidine) | 54827-17-7 | 1-5 | STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) |

Section 4. First Aid Measure

Eve contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation: Move to fresh air.

Ingestion: Clean mouth with water. Drink plenty of water.

Notes to physician: Treat symptomatically.

Section 5. Fire Fighting Measures

Flammable properties: Not flammable.

Flash point: not determined.

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact: None. **Sensitivity to Static Discharge:** None.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

Personal precautions: Ensure adequate ventilation.

Environmental precautions: Try to prevent the material from entering drains or water courses.

Methods for containment: Prevent further leakage or spillage if safe to do so. **Methods for cleaning up:** Pick up and transfer to properly labeled containers.

Section 7. Handling & Storage

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8. Exposure Controls and Personal Protection

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure

limits established by the region specific regulatory bodies.

Engineering measures: Showers, Eyewash stations, Ventilation systems.

Personal protective equipment

Eye/face protection: No special protective equipment required.

Skin and body protection: No special protective equipment required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and Chemical Properties

Appearance: No information available. **Odor Threshold:** No information available.

pH: No information available.



Decomposition temperature: No information available.

Melting point/range: No information available. **Explosion limits:** No information available.

Specific Gravity: No data available.

Flash point: No information available.

Evaporation rate: No information available.

Vapor density: No data available. **Odor** No information available.

Physical State at 20°C: No information available. Autoignition temperature: No information available. Boiling point/boiling range: No information available. Flammability Limits in Air: No information available.

solubility: No information available.

Vapor Pressure at 20°C (kPa): No information available.

VOC Content (%): Not applicable.

Section 10. Stability and reactivity

Stability: Stable under recommended storage conditions.

Incompatible products: None known based on information supplied. **Conditions to avoid:** None known based on information supplied.

Hazardous decomposition products: None known based on information supplied.

Hazardous polymerization: Hazardous polymerization does not occur.

Section 11. Toxicological Information

Acute toxicity

Product Information: Product does not present an acute toxicity hazard based on known or supplied

information. **Chronic toxicity**

Target Organ Effects: None known.

Section 12. Ecological Information

Ecotoxicity: The environmental impact of this product has not been fully investigated.

Section 13. Disposal Considerations

Waste disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging: Do not re-use empty containers.



Section 14. Transport Information

DOT: Not dangerous goods. **IATA:** Not dangerous goods. **ADR:** Not dangerous goods.

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard no Chronic Health Hazard no

Fire Hazard no

Sudden Release of Pressure Hazard no

Reactive Hazard no

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

International Regulations

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other information

Full text of H-Statements referred to under sections 2 and 3

H335 - May cause respiratory irritation.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Version 3

Revision Date 03 Oct 2019

Revision Note No information available.

Disclaimer:

Exalpha Biologicals, Inc provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Exalpha Biologicals, Inc. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, Exalpha Biologicals, Inc. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

Prepared by: Exalpha Biologicals, Inc Phone Number: 978-425-1370 (U.S.A.)