

# Common Extraction Accessory Set

## Corn, Corn Flour, or Masa Flour

Catalog Number ACC-105

Part #12496

### Intended Use

This Common Extraction Accessory Set is intended for use with the following kits:

|                 |                | Corn<br>(Page 1-2) | Corn Flour<br>(Page 3) | Masa Flour<br>(Page 4) |
|-----------------|----------------|--------------------|------------------------|------------------------|
| AQ-309-BG / BGZ | Aflatoxin Flex | ✓                  | ✓                      | ✓                      |
| AQ-311-BG       | Fumonisin Flex | ✓                  | ✓                      | ✓                      |
| AQ-304-BG       | DON Flex       | ✓                  |                        |                        |

It allows for a single sample preparation of a bulk corn sample, corn flour sample, or masa flour sample utilizing a common extraction protocol and unique codes on each kit's Multi-Matrix Barcode Card (MMBC). Each test is then run following the instructions below.

### CORN: Sample Preparation

Turn on the incubator and set to 22°C for a minimum of 10 minutes before testing. Ensure that the temperature display has stabilized and indicates "OK" before starting the assay. All test kits and reagents should be at room temperature before testing.

1. Collect a composite sample according to your own sampling plan or USDA/GIPSA guidelines.
2. Grind samples to provide a consistency such that 95% passes through a 20 mesh sieve.
3. Mix ground material thoroughly before sub-sampling, to minimize variability.
4. Weigh **25g** or **50g** samples into **hard-walled** containers that will allow enough head room for the liquid to move forcefully when shaken vigorously.

#### EXTRACTION

##### 25g Samples

1. Add 1 EB17 pouch to sample
2. Add 75 mL water
3. Shake immediately for 10 seconds to dissolve pouch and wet entire sample
4. Immediately proceed to next shaking step

##### 50g Samples\*

1. Add 2 EB17 pouches to sample and
2. Add 150 mL water
3. Shake immediately for 10 seconds to dissolve pouch and wet entire sample
4. Immediately proceed to next shaking step

- Use distilled, deionized, or flat (non-carbonated) bottled water. Drinkable (potable) tap water may be used, with customer validation of water supply. Contact Technical Support to purchase a control set to verify tap water.
- Use the EB17 pouches provided in AQ-309-BG, QuickTox Kit for Aflatoxin Flex.
- \*If testing 50-gram samples, or not purchasing AQ-309-BG, EB17 pouches will be required (Catalog No. ACC-035)

#### SHAKE

Mechanical or Hand

Mechanical Shaker: Shake sample at highest speed ( $\geq 300$ rpm) for 1 minute

Hand Shaking: Shake vigorously by hand for 2 minutes

#### CLARIFICATION

Centrifuge or Filter

##### Centrifugation

1. Fill microcentrifuge tube with extract
2. Centrifuge for 30 seconds at 2000 x g (rcf, **not rpm**)
3. Use the top layer of extract

##### Filtration

1. Add an approved coffee filter (e.g. BUNN Part #BUNBCF100B) to a clean vessel
2. Pour extract into the filter; allow to filter for no more than 2 minutes
3. Pull back the filter to access the filtered extract

### Corn: For each test being run:

#### COMBINE BUFFER AND EXTRACT

##### Aflatoxin or DON (Base Ranges)

1. Add 100  $\mu$ L DB5 to a reaction tube (discard tip, load new one for extract)
2. Add 100  $\mu$ L clarified extract to the reaction tube

##### Fumonisin (Base Range)

1. Add **3 mL** DB5 to a blue dilution tube with large pipette
2. Add 50  $\mu$ L clarified extract to blue dilution tube

#### Important Notes:

- **QuickScan Software Version 5 Update 4 or later is required**
- **Scan the Multi-Matrix Barcode Cards (MMBC) provided with each kit, once per kit lot**

#### Contents of Set:

- DB5 Buffer
  - Instructions
- Items not provided:**
- 50 EB17 Extraction Powder dissolvable pouches (only needed if not purchasing AQ-309-BG QuickTox Kit for Aflatoxin Flex)

|   |   |
|---|---|
| <b>Aflatoxin or DON (Base Ranges)</b>   | <b>Fumonisin (Base Range)</b>   |
| 3. Mix thoroughly with pipette tip, discard tip   | 3. Mix thoroughly with large pipette tip, discard tip   |
| 4. Place reaction tube into incubator, acclimatize for 2 minutes if room temperature is outside 20-24°C | 4. Transfer 200 µL into clear reaction tube   |
|   | 5. Place reaction tube into incubator, acclimatize for 2 minutes if room temperature is outside 20-24°C |

**RUN TEST STRIPS**

| 1. Add test strip to tube, arrows down, and allow the test to run for <b>4 minutes</b>   |              |              |              |            |                    |     |     |            |              |      |     |           |                        |     |     |           |
|--|--------------|--------------|--------------|------------|--------------------|-----|-----|------------|--------------|------|-----|-----------|------------------------|-----|-----|-----------|
| 2. Immediately upon completion, cut strips at the top of the arrow tape (discard bottom pads)  |              |              |              |            |                    |     |     |            |              |      |     |           |                        |     |     |           |
| 3. Insert strips into QuickScan Reader   |              |              |              |            |                    |     |     |            |              |      |     |           |                        |     |     |           |
| 4. Touch or click "Read Test"  |              |              |              |            |                    |     |     |            |              |      |     |           |                        |     |     |           |
| 5. Utilizing the matrix group and dilution pulldown menus, <b>take care to choose the proper Matrix Group and Dilution options:</b>  |              |              |              |            |                    |     |     |            |              |      |     |           |                        |     |     |           |
| <table border="1"> <thead> <tr> <th></th> <th>Matrix Group</th> <th>Dilution Tab</th> <th>Base Range</th> </tr> </thead> <tbody> <tr> <td>a. Aflatoxin Flex:</td> <td>MG1</td> <td>1:1</td> <td>2.7-30 ppb</td> </tr> <tr> <td>b. DON Flex:</td> <td>MG21</td> <td>1:1</td> <td>0.2-8 ppm</td> </tr> <tr> <td>c. Fumonisin Flex 311:</td> <td>MG4</td> <td>1:A</td> <td>1.5-7 ppm</td> </tr> </tbody> </table> |              | Matrix Group | Dilution Tab | Base Range | a. Aflatoxin Flex: | MG1 | 1:1 | 2.7-30 ppb | b. DON Flex: | MG21 | 1:1 | 0.2-8 ppm | c. Fumonisin Flex 311: | MG4 | 1:A | 1.5-7 ppm |
|  | Matrix Group | Dilution Tab | Base Range   |            |                    |     |     |            |              |      |     |           |                        |     |     |           |
| a. Aflatoxin Flex:   | MG1          | 1:1          | 2.7-30 ppb   |            |                    |     |     |            |              |      |     |           |                        |     |     |           |
| b. DON Flex:   | MG21         | 1:1          | 0.2-8 ppm    |            |                    |     |     |            |              |      |     |           |                        |     |     |           |
| c. Fumonisin Flex 311:   | MG4          | 1:A          | 1.5-7 ppm    |            |                    |     |     |            |              |      |     |           |                        |     |     |           |

**Corn: Results Outside of Base Range**

If after running the base range, the user wishes to do further testing to determine levels outside the base range, these instructions may be followed for each test:

**AQ-309-BG: Aflatoxin Flex (more detailed instructions in AQ-309-BG product insert)**

| MG1<br>Extended Dilution    | Pre-mix, then transfer   | Add Reaction Tube to Incubator Set at 22°C | Add Strip for | Read in QuickScan:                             |
|-----------------------------|--|--|---------------|--|
| Dilution A<br>30 – 100 ppb  | <b>Pre-Mix</b><br>400 µL Dil'n Sol'n + 100 µL extract<br><b>Transfer</b><br>100 µL of this Pre-Mix and 100 µL DB5                    | Acclimate tube for 2 min <sup>^</sup>      | 4 min.        | Dilution Tab on Result Page should display 1:A |
| Dilution B<br>100 – 300 ppb | <b>Pre-Mix</b><br>200 µL Dil'n Sol'n + 100 µL pre-mix extract from Dil A<br><b>Transfer</b><br>100 µL of this Pre-Mix and 100 µL DB5 | Acclimate tube for 2 min <sup>^</sup>      | 4 min.        | Dilution Tab on Result Page should display 1:B |

†EB17 Dilution Solution: Dissolve 1 EB17 pouch in 150 mL of water and mix well; Dilution Solution mixture will appear cloudy. Label, date, and document the preparation. Dilution Solution can be stored at ambient temperature for 30 days. Thoroughly mix before use.

**AQ-304-BG: DON Flex**

- In a separate tube (not provided) combine extract with water to create a 1:8 dilution. Example: 1 part clarified extract + 7 parts water; 100 µL + 700 µL). Measure carefully and mix well.
- Rerun assay as before, adding 100 µL **DB5** Buffer + 100 µL newly diluted extract into a new reaction tube (mix, add to the incubator and acclimate if necessary), add a new strip for 4 minutes.
- In the QuickScan Results Screen, choose "1:A" under the Dilution tab (dropdown menu). The System will calculate and record the DON level in the diluted sample.

| MG21<br>Extended Dilution     | Pre-mix sample, then transfer to clear Reaction Tube  | Add Reaction Tube to incubator set at 22°C | Add strip for | Read in QuickScan                              |
|-------------------------------|---|--|---------------|--|
| Valid range:<br>2.0 to 30 ppm | <b>Pre-Mix</b> 700 µL water + 100 µL extract<br><b>Transfer</b> 100 µL Pre-Mix + 100 µL DB5 | Acclimate tube for 2 min <sup>^</sup>      | 4 min         | Dilution Tab on Result Page should display 1:A |

**AQ-311-BG: Fumonisin Flex**

If after running and reading the test, the initial result is less than 1.5 ppm, samples can be retested in the High Sensitivity range.

| MG4<br>High Sensitivity              | Pre-mix sample in blue Dilution Tube, then transfer to clear Reaction Tube        | Add Reaction Tube to Incubator set at 22°C | Add strip for | Read in QuickScan               |
|--------------------------------------|---|--|---------------|---------------------------------|
| 0.2 to 1.5 ppm<br>(High Sensitivity) | <b>Pre-Mix</b> 375 µL <b>DB5</b> buffer + 50 µL extract<br><b>Transfer</b> 200 µL | Acclimate tube for 2 min <sup>^</sup>      | 4 min         | Dilution Tab should display 1:1 |

<sup>^</sup> The tube acclimation step is only required if the temperature of the testing environment is unknown or outside of 20 - 24°C (68 - 75°F).

## CORN FLOUR: Sample Preparation

Turn on the incubator and set to 22°C for a minimum of 10 minutes before testing. Ensure that the temperature display has stabilized and indicates "OK" before starting the assay. All test kits and reagents should be at room temperature before testing.

1. Collect a composite sample according to your own sampling plan or USDA/GIPSA guidelines.
2. Weigh **10g** samples into **hard-walled** containers that will allow enough head room for the liquid to move forcefully when shaken vigorously.

### EXTRACTION

#### 10g Samples

1. Add 1 EB17 pouch to sample
2. Add 60 mL water
3. Shake immediately for 10 seconds to dissolve pouch and wet entire sample  
Immediately proceed to next shaking step

- Use distilled, deionized, or flat (non-carbonated) bottled water. Drinkable (potable) tap water may be used, with customer validation of water supply. Contact Technical Support to purchase a control set to verify tap water.
- Use the EB17 pouches provided in AQ-309-BG, QuickTox Kit for Aflatoxin Flex.

### SHAKE

Mechanical or Hand

Mechanical Shaker: Shake sample at highest speed ( $\geq 300$ rpm) for 1 minute

Hand Shaking: Shake vigorously by hand for 2 minutes

### CLARIFICATION

Centrifuge or Filter

#### Centrifugation

1. Fill microcentrifuge tube with extract
2. Centrifuge for 1 minute at 2000 x g (rcf, **not rpm**)
3. Use the top layer of extract

#### Filtration

1. Add an approved coffee filter (e.g. BUNN Part #BUNBCF100B) to a clean vessel
2. Pour extract into the filter; allow to filter for no more than 2 minutes
3. Pull back the filter to access the filtered extract

## Corn Flour: For each test being run:

### COMBINE BUFFER AND EXTRACT

#### Aflatoxin (Base Range)

1. Add 100  $\mu$ L DB5 to a reaction tube (discard tip, load a new one for extract)
2. Add 200  $\mu$ L clarified extract to the reaction tube
3. Mix thoroughly with extract pipette tip, discard tip
4. Place reaction tube into incubator, acclimatize for 2 minutes if room temperature is outside 20-24°C

#### Fumonisin (Base Range)

1. Add **0.7 mL** DB5 to a blue dilution tube with large pipette.
2. Add 50  $\mu$ L clarified extract to blue dilution tube
3. Mix thoroughly using tip of large pipette
4. Transfer 200  $\mu$ L into clear reaction tube
5. Place reaction tube into incubator, acclimatize for 2 minutes if room temperature is outside 20-24°C

### RUN TEST STRIPS

1. Add test strip to tube, arrows down, and allow the test to run for **4 minutes**
2. Immediately upon completion, cut strips at the top of the arrow tape (discard bottom pads)
3. Insert strips into QuickScan Reader
4. Touch or click "Read Test"
5. Utilizing the matrix group and dilution pulldown menus, **take care to choose the proper Matrix Group and Dilution options:**

|                        | <u>Matrix Group</u> | <u>Dilution Tab</u> | <u>Base Range</u> |
|------------------------|---------------------|---------------------|-------------------|
| a. Aflatoxin Flex:     | MG6                 | 1:1                 | 2.7-30 ppb        |
| b. Fumonisin Flex 311: | MG6                 | 1:A                 | 0.5-5 ppm         |

## MASA FLOUR: Sample Preparation

Turn on the incubator and set to 22°C for a minimum of 10 minutes before testing. Ensure that the temperature display has stabilized and indicates "OK" before starting the assay. All test kits and reagents should be at room temperature before testing.

1. Collect a composite sample according to your own sampling plan or USDA/GIPSA guidelines.
2. Grind samples to provide a consistency such that 95% passes through a 20 mesh sieve.
3. Weigh **10g** samples into **hard-walled** containers that will allow enough head room for the liquid to move forcefully when shaken vigorously.

### EXTRACTION

#### 10g Samples

1. Add 1 EB17 pouch to sample
2. Add 60 mL water
3. Shake immediately for 10 seconds to dissolve pouch and wet entire sample  
**Immediately** proceed to next shaking step

- Use distilled, deionized, or flat (non-carbonated) bottled water. Drinkable (potable) tap water may be used, with customer validation of water supply. Contact Technical Support to purchase a control set to verify tap water.
- Use the EB17 pouches provided in AQ-309-BG, QuickTox Kit for Aflatoxin Flex.

### SHAKE

Mechanical or Hand

Mechanical Shaker: Shake sample at highest speed ( $\geq 300$ rpm) for 1 minute

Hand Shaking: Shake vigorously by hand for 2 minutes

### CLARIFY

Centrifuge or Filter

#### Centrifugation

1. Fill microcentrifuge tube with extract
2. Centrifuge for 1 minute at 2000 x g (rcf, *not rpm*)
3. Poke through white floating layer (if present) to access extract

#### Filtration

1. Add an approved coffee filter (e.g. BUNN Part #BUNBCF100B) to a clean vessel
2. Pour extract into the filter; allow to filter for no more than 2 minutes
3. Pull back the filter to access the filtered extract

## Masa Flour: For each test being run:

### COMBINE BUFFER AND EXTRACT

#### Aflatoxin (Base Range)

1. Add **100 µL** DB5 to a reaction tube (discard tip, load a new one for extract)
2. Add **200 µL** clarified extract to the reaction tube
3. Mix thoroughly with extract pipette tip, discard tip
4. Place reaction tube into incubator, acclimatize for 2 minutes if room temperature is outside 20-24°C

#### Fumonisin (Base Range)

1. Add **4 mL** DB5 to a blue dilution tube with large pipette.
2. Add 50 µL clarified extract to blue dilution tube
3. Mix thoroughly by covering tube and inverting 10 times
4. Transfer 200 µL into clear reaction tube
5. Place reaction tube into incubator, acclimatize for 2 minutes if room temperature is outside 20-24°C

### RUN TEST STRIPS

1. Add test strip to tube, arrows down, and allow the test to run for **4 minutes**
2. Immediately upon completion, cut strips at the top of the arrow tape (discard bottom pads)
3. Insert strips into QuickScan Reader
4. Touch or click "Read Test"
5. Utilizing the matrix group and dilution pulldown menus, **take care to choose the proper Matrix Group and Dilution options:**

|                        | <u>Matrix Group</u> | <u>Dilution Tab</u> | <u>Base Range</u> |
|------------------------|---------------------|---------------------|-------------------|
| a. Aflatoxin Flex:     | MG5                 | 1:1                 | 2.7-30 ppb        |
| b. Fumonisin Flex 311: | MG5                 | 1:A                 | 0.5-5 ppm         |

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Revision nr.2  
Dated 04/29/2019  
Page n. 1 / 6

**ENVIROLOGIX**

**Safety data sheet**

**SECTION 1. Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**  
Trade name: **DB 5 Dilution Buffer**  
Part number: 11150, 11665, 12495 (KR-266)

**1.2 Relevant identified uses of the substance or mixture and uses advised against application of the substance / the preparation :**  
Laboratory chemicals; kit component. Not to be used for purposes other than those specified in product literature.

**1.3 Details of the supplier of the safety data sheet**  
Manufacturer/Supplier: EnviroLogix Inc., 500 Riverside Industrial Pkwy.  
Portland ME 04103, USA  
Phone: (207) 797-0300

**1.4 Emergency telephone number:** (207) 797-0300 Technical Service

**SECTION 2. Hazards identification.**

**2.1 Classification of the substance or mixture**  
Classification according to 29CFR 1910.1200: Eye Damage Category 1  
Aquatic Toxic, Chronic Category 2

**2.2 Label elements**  
Labeling according to 29CFR 1910.1200:

Pictogram:

Signal word: Warning

Hazard Statements: H318 Causes serious eye damage  
H411 Toxic to aquatic life with long lasting effects

Precautionary Statements: P264 Wash hands thoroughly after handling  
P280 Wear protective gloves/protective clothing/eye Protection/face protection  
P305+P351+P338 IF IN EYES: Rinse cautiously with Water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P337+P313 IF eye irritation persists: Get medical attention/advice

**2.3 Other Statements**  
Restricted to professional users

SDS DB5 Dilution Buffer

Revision nr.2  
Dated 04/29/2019  
Page n. 2 / 6

**ENVIROLOGIX**

**SECTION 3. Composition/information on ingredients.**

| Chemical name   | CAS No    | EC No     | Classification According to 29CFR 1910.1200  | Amount (%) |
|---|-----------|-----------|--|------------|
| Sodium Tetraborate Decahydrate                          | 1303-96-4 | 215-340-4 | H360 Rep 1B  | <3 %       |
| p-tertiary Octylphenoxypolyethyl alcohol (Triton X-100) | 9002-93-1 |           | H302 Acute Tox. Oral 4<br>H315 Skin Irrit. 2<br>H318 Eye Dam. 1<br>H411 Aquatic Chronic 2                                  | 1 %        |
| Surfynol  | 9014-85-1 |           | H315 Skin irritation 2<br>H318 Eye damage 1<br>H335 STOT SE 3  | 2 %        |
| 1,2-Benzisothiazolin-3-one (Proxel-GXL)                 | 2634-33-5 | 220-120-9 | H302 Acute Tox. 4; H315 Skin Irrit. 2<br>H317 Skin Sens. 1 (C <sub>2</sub> 0.05%)<br>H318 Eye Dam. 1; H400 Aquatic Acute 1 | 0.048 %    |

**SECTION 4. First aid measures.**

**4.1 Description of first aid measures**  
After inhalation: In case of inhalation. Remove to fresh air. If not breathing give artificial respiration. Get medical attention immediately.  
After skin contact: In case of skin contact. Remove contaminated clothing and shoes immediately. Wash affected area with mild soap or detergent for at least 10 minutes or until no evidence of chemical remains.  
After eye contact: In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Lifting eyelids occasionally, until no evidence of chemical remains. Get medical attention immediately.  
After swallowing: In case of ingestion. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a physician immediately.

**4.2 Most important symptoms and effects, both acute and delayed:** None

**4.3 Indication of any immediate medical attention and special treatment needed:** None

**SECTION 5. Firefighting measures.**

**5.1 Extinguishing media:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture:** None

**5.3 Advice for firefighters:** Wear protective gear appropriate for fire conditions including respiratory protective gear.

SDS DB5 Dilution Buffer

Revision nr.2  
Dated 04/29/2019  
Page n. 3 / 6

**ENVIROLOGIX**

**SECTION 6. Accidental release measures.**

**6.1 Personal precautions, protective equipment and emergency procedures:** In the case of spilled mixture wear gloves to prevent skin contact. In the case of a large spill, additional protection is recommended.

**6.2 Environmental precautions:** Do not discharge mixture to sewer system or waterways.

**6.3 Methods and material for containment and cleanup:** Absorb in paper towel and discard in appropriate waste. Clean with water afterwards. Large spills may be neutralized with dilute solutions of sodium carbonate or calcium oxide.

**6.4 References to other sections:** For safe handling refer to Section 7. For information on PPE refer to Section 8. For disposal refer to Section 13

**SECTION 7. Handling and storage.**

**7.1 Precautions for safe handling:** Practice good chemical hygiene when handling. Avoid contact with eyes, skin, and clothing.

**7.2 Conditions for safe storage, including any incompatibilities:** Store in tightly closed, non-metal container, in a corrosive compatible area. Prevent direct sunlight and heat. Store in well aired storage rooms.

**7.3 Specific end uses:** Apart from the uses mentioned in section 1.2, no other specific uses are stipulated

**SECTION Exposure controls/personal protection.**

**8.1 Exposure limits:** Components with limit values that require monitoring at the workplace:

|                                | EH40/2005                     | OSHA                            |
|--------------------------------|-------------------------------|---------------------------------|
| Sodium Tetraborate Decahydrate | 8 Hr TWA = 5mg/m <sup>3</sup> | 8 Hr TWA = 10 mg/m <sup>3</sup> |

**8.2 Exposure Controls:**

**8.2.1 Engineering controls**  
Facilities using this mixture should be equipped with an eyewash and safety shower. Use general or local exhaust ventilation to keep airborne concentrations below permissible exposure limits.

**8.2.2 General protective and hygienic measures:** The usual precautionary measures should be adhered to when handling chemicals.

**Eye Protection:** Safety glasses with side shields, goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Eye and face protection regulations are described by OSHA (US) in 29CFR1910.133. Do not wear contact lenses when working with chemicals

**Hand Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Breathing Equipment:** Appropriate respiratory protection should be determined according to local conditions using risk analysis protocols. An approved disposable air purifying particulate respirator may be used as a backup to engineering controls. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**8.2.3 Environmental exposure controls:** Contain spills, do not allow into environment

SDS DB5 Dilution Buffer

Revision nr.2  
Dated 04/29/2019  
Page n. 4 / 6

**ENVIROLOGIX**

**SECTION 9. Physical and chemical properties.**

**9.1 Information on basic physical and chemical properties:**

a) Appearance: Clear liquid, colorless to slight yellow.  
b) Odor: None  
c) Odor Threshold: No Data Available  
d) pH: 8,6  
e) Melting point/freezing point: No Data Available  
f) Boiling point/Boiling range: No Data Available.  
g) Flash point: Not applicable.  
h) Evaporation rate: No Data Available  
i) Flammability (solid, gaseous): No Data Available  
j) Upper/lower flammability or explosive limits: No Data Available  
k) Vapor pressure: No Data Available  
l) Vapor density: No Data Available  
m) Relative density: No Data Available  
n) Solubility(ies): Fully miscible, water.  
o) Partition Coefficient: n-Octanol/water: No Data Available  
p) Auto-ignition temperature: No Data Available  
q) Decomposition temperature: No Data Available  
r) Viscosity: No Data Available  
s) Explosive properties: No Data Available  
t) Oxidizing properties: No Data Available

**9.2 Other information:** No further relevant information available.

**SECTION 10. Stability and reactivity.**

**10.1 Reactivity:** No data available

**10.2 Chemical Stability:** Stable under normal temperatures and pressures.

**10.3 Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid:** No specific data

**10.5 Incompatible materials:** No Data Available.

**10.6 Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decompositions products should not be produced.

**SECTION 11. Toxicological information.**

**Information on Toxicological Effects**  
**Triton X-100**  
Acute toxicity: Oral LD50 -Rat- 1800mg/kg  
Dermal LD50- Rabbit- 8000 mg/kg

Sensitization: No sensitizing effects known

CMR (carcinogenicity, mutagenicity and toxicity for reproduction) effects: No CMR effects.

Additional toxicological information: No Additional Information

SDS DB5 Dilution Buffer



Revision nr.2  
Dated 04/29/2019  
Page n. 5 / 6

**SECTION 12. Ecological information.**

**12.1 Toxicity:** Fish: LC50 Pimephales promelas (fathead minnow) – 8.9mg/l – 96.0 hr  
Triton X-100 Daphnia: EC50 – Daphnia – 26 mg/l – 48 hr

**12.2 Persistence and degradability :** No Data Available

**12.3 Bio accumulative potential:** No Data Available

**12.4 Mobility in soil :** No Data Available

**12.5 Results of PBT and vPvB assessment:** Not available as a chemical safety assessment, not required/not conducted.

**12.6 Other adverse effects:** No Data Available

**SECTION 13. Disposal considerations.**

Waste treatment methods: Contact a licensed professional waste disposal service to dispose of this material. Disposal of surplus or waste solutions must be in accordance with applicable local, state, and national laws and regulations.

**SECTION 14. Transport information.**

**14.1 UN-Number DOT, ADR, ADN, IMDG, IATA :** Not Hazardous for Transport

**14.2 UN proper shipping name DOT, ADR, ADN, IMDG, IATA :** Not Hazardous for Transport

**14.3 Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA):** Not Hazardous for Transport

**14.4 Packing group (DOT, ADR, IMDG, IATA):** Not Hazardous for Transport

**14.5 Environmental hazards** No environmental hazard.

**14.6 Special precautions for user :** None

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:** No information available.

**SECTION 15. Regulatory information.**

**15.1 Safety, health, and environmental regulations**

US Federal Regulations

OSHA Not a hazardous material

SARA 313 Not listed

US State Regulations

European/International Regulations

European labeling in accordance with EC Directives Not hazardous according to European directives

**15.2 Chemical Safety Assessment** Not carried out

SDS DB5 Dilution Buffer



Revision nr.2  
Dated 04/29/2019  
Page n. 6 / 6

**SECTION 16. Other information.**

*This information is true based on our present knowledge. However, EnviroLogix makes no representation of its accuracy or completeness. Persons receiving this information must exercise their independent judgment in determining the product's safety and suitability for its intended use. This document shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship*

EHS Department  
EnviroLogix Inc.

**Codes:**

**H302** Harmful if swallowed    **H315** Causes skin irritation    **H317** May cause an allergic skin reaction  
**H318** Causes Serious Eye Damage    **H335** May cause respiratory irritation    **H411** Toxic to Aquatic Life with Long Lasting Effects

SDS DB5 Dilution Buffer