

This safety data sheet complies with the requirements of:
 Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

| | | |
|---------------------|--|-----------------|
| Product Name | Library Prep Kit for myBaits® (32 or 128 reactions) | |
| | <u>Box A</u> | |
| | - Frag/AT Buffer | 150 or 590 uL |
| | - Frag/AT Enzymes | 220 or 890 uL |
| | - Ligation Mix | 740 or 1480 uL |
| | - Amplification Mix | 1150 or 1550 uL |
| | - P5/P7 Primer Mix | 230 or 920 uL |
| | <u>Box B</u> | |
| | - SPRI Beads | 7.5 mL |
| | - Buffer P | 5.0 mL |

Product Code 910032 or 910128

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use For research use only.
 Not intended for human or animal diagnostic or therapeutic uses.

1.3. Details of the supplier of the safety data sheet

Company Information
 Daicel Arbor Biosciences
 5840 Interface Drive, Suite 101
 Ann Arbor, MI 48103
 USA
 Tel: +1 (734) 998-0751
 techsupport@arbor.daicel.com

1.4. Emergency telephone number

Emergency Telephone Chemtrec US (800) 424-9300 Chemtrec EU (202) 483-7616

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| | |
|--------------------------------------|---------------------|
| Acute Toxicity Oral | Category 3 - (H301) |
| STOT SE – may cause damage to organs | Category 1 - (H370) |
| Aquatic Hazard (Chronic) | Category 3 - (H412) |

2.2. Label elements



Signal word

Danger

Hazard statements

H301 - Toxic if swallowed

H370 - Causes damage to organs

H412 – Harmful to aquatic life with long lasting effects

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

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

P273 - Avoid release to the environment

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P308 + P311 - If exposed or concerned: Get medical advice/attention

P330 - Rinse mouth

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| Chemical name | EC No | CAS No | Weight% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH STATUS |
|---|-----------|---------|---------|---|--------------|
| Component – Box A Frag/AT Buffer & Amplification Mix | | | | | |
| Tetramethylammonium chloride | 200-880-8 | 75-57-0 | ≥2-<6 | Acute Tox 3; (H301) Acute Tox 3; (H311) Skin Irrit. 2; (H315) STOT SE 1; (H370) Aquatic (Chronic) 3; (H412) | Registered |

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

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.

| | |
|-------------------|--|
| Inhalation | Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her. If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink. |
| Ingestion | In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance. |

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

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire extinguishing water to enter the sewage system and nearby surface waters. If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
 Halogenated compounds
 Nitrogen oxides (NO_x)
 Carbon oxides (CO / CO₂)
 Some metal oxides

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment as required.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

| | |
|--|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Dispose of via a licensed waste disposal contractor. |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |

6.4. Reference to other sections

| | |
|------------------------------------|--|
| Reference to other sections | See section 8 for more information. See section 13 for more information. |
|------------------------------------|--|

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

| | |
|---------------------------------------|--|
| Advice on safe handling | Ensure adequate ventilation. |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|---|
| Storage Conditions | Keep/store only in original container. Keep tightly closed in a dry and cool place. |
|---------------------------|---|

7.3. Specific end use(s)

| | |
|--------------------------------------|--|
| Risk Management Methods (RMM) | The information required is contained in this Safety Data Sheet. |
|--------------------------------------|--|

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| | |
|---|---|
| Exposure Limits | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Derived No Effect Level (DNEL) | No information available. |
| Predicted No Effect Concentration (PNEC) | No information available. |

8.2. Exposure controls

| | |
|--|--|
| Engineering controls | Showers Eyewash stations Ventilation systems. |
| Personal protective equipment | |
| Eye/face protection | Tight sealing safety goggles. |
| Hand Protection | Wear suitable gloves. |
| Skin and body protection | Wear suitable protective clothing. |
| Respiratory protection | Use in well-ventilated areas. |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |
| Environmental exposure controls | No information available. |

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | <u>Box A</u> | <u>Box B</u> |
|--------------------------------|--------------------------|----------------|
| Physical state | Liquid | Liquid |
| Appearance | Clear | Slightly amber |
| Odor | Mild | Odorless |
| pH | 7-8.5 | 7-7.5 |
| <u>Property</u> | <u>Values</u> | |
| Melting point / freezing point | No information available | |
| Boiling point / boiling range | No information available | |
| Flash point | No information available | |
| Evaporation rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | No information available | |
| Vapor density | No information available | |
| Relative density | No information available | |
| Water solubility | No information available | |
| Solubility(ies) | No information available | |
| Partition coefficient | No information available | |
| Autoignition temperature | No information available | |
| Decomposition temperature | No information available | |
| Kinematic viscosity | No information available | |
| Dynamic viscosity | No information available | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |

9.2. Other information

| | |
|----------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |
| Particle Size | No information available |
| Particle Size Distribution | No information available |

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity Not reactive under recommended handling and storage conditions.

10.2. Chemical stability

Stability Stable under recommended handling and storage conditions.

Explosion data

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Hazardous reactions are not anticipated under recommended conditions of handling and storage.

10.4. Conditions to avoid

Conditions to avoid Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

10.5. Incompatible materials

Incompatible materials Oxidizing agents. Strong acids or bases

10.6. Hazardous decomposition products

Hazardous decomposition products The product is not degraded when used as specified in section 1.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

| Ingredient name | Result | Species | Dose | Exposure |
|------------------------------|---------------|----------------|-------------|-----------------|
| Tetramethylammonium chloride | LD50 Oral | Rat | 50 mg/kg | - |
| Glycerol | LD50 Oral | Rat | 12600 mg/kg | |

Information on likely routes of exposure:

Product Information.

Inhalation Causes damage to organs following a single exposure if inhaled.
Eye contact No known significant effects or critical hazards.
Skin contact Causes damage to organs following a single exposure in contact with skin.
Ingestion Toxic if swallowed. Causes damage to organs following a single exposure if swallowed.

Information on toxicological effects

Symptoms Toxic if swallowed. Causes damage to organs.

Numerical measures of toxicity

Acute toxicity
Unknown acute toxicity None.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No known significant effects or critical hazards.
Serious eye damage/eye irritation No known significant effects or critical hazards.
Respiratory or skin sensitization No known significant effects or critical hazards.
Germ cell mutagenicity No known significant effects or critical hazards.
Carcinogenicity No known significant effects or critical hazards.
Reproductive toxicity No known significant effects or critical hazards.
STOT - single exposure No known significant effects or critical hazards.
STOT - repeated exposure No known significant effects or critical hazards.
Aspiration hazard No known significant effects or critical hazards.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects

| Ingredient name | Result | Species | Exposure |
|------------------------------|---------------------------------|----------------------------|-----------------|
| Tetramethylammonium chloride | Acute LC50 462 mg/L Fresh water | Fish – Pimephales promelas | 96 hours |
| Glycerol | LC50 51-57 mL/L | Fish – Oncorhynchus mykiss | 96 hours |

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

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

Contaminated packaging

Empty containers must be tripled rinsed prior to disposal.

Section 14: TRANSPORT INFORMATION

IMDG

| | |
|---|--------------------------|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard Class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 Marine pollutant | Not applicable |
| 14.6 Special Provisions | None |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | No information available |

IATA

| | |
|---------------------------|----------------------|
| | Not regulated |
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard Class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions | None |

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 2023/2055 (REACH), Annex XIV)

This product does not contain substances subject to restriction (Regulation (EC) No. 2023/2055 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories

| | |
|---------------|------------|
| TSCA | Listed |
| DSL/NDL | Listed DSL |
| EINECS/ELINCS | Listed |
| ENCS | Listed |
| IECSC | Listed |
| KECL | Listed |
| PICCS | Listed |
| AIIC | Listed |
| NZICoS | Listed |
| TCSI | Listed |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemical

NZICoS - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

15.2. Chemical safety assessment

Chemical Safety Report No information available

Canada

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

| | |
|-----------------|--|
| Canadian NPRI | Not Listed |
| WHIMIS (Canada) | Class D2A: Very Toxic Material at $\geq 1\%$ |

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H301 - Toxic if swallowed

H311 – Toxic in contact with skin

H315 – Causes skin irritation

H370 - Causes damage to organs

H412 - Harmful to aquatic life with long lasting effects

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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End of Safety Data Sheet