# Safety Data Sheet

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### Identification of the substance or mixture

| Product code | B49                            |
|--------------|--------------------------------|
| Product name | 50X TAE Electrophoresis Buffer |

## Company/undertaking identification

Thermo Fisher Scientific Baltics UAB V.Graiciuno 8 LT-02241 Vilnius Lithuania Tel.: +370 5 2602131 Fax.: +370 5 2602142 Life Technologies 5250 Mainway Drive Burlington, ONT CANADA L7L 6A4 800/263-6236

| 24 hour Emergency Response for Hazardous Materials | s Within the USA + Canada: 1-800-424-9300 and |
|--|---|
| [or Dangerous Goods] Incident. Spill, Leak, Fire,  | 1-703-527-3887                                |
| Exposure, or Accident. Call CHEMTREC               | Outside the USA + Canada: 1-703-741-5970      |

**Country Specific Emergency Number (if available):** 

For research use only. Not for use in diagnostic procedures

SECTION 2: Hazards identification

# **GHS Classification**

Signal Word WARNING

Hazard pictograms



#### **Health hazards**

Specific target organ toxicity (STOT) – repeated exposure

Category 2

# **Physical hazards**

Not classified

# **Environmental hazards**

Not classified

# **Hazard Statements**

H373 - May cause damage to organs through prolonged or repeated exposure

# **Precautionary Statements**

# Prevention

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

# Response

P314 - Get medical advice/attention if you feel unwell

# Storage

Not Applicable

# Disposal

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

# Other hazards

Not Applicable

# HMIS

| Health       | 4 * |
|--------------|-----|
| Flammability | 0   |
| Reactivity   | 0   |

# SECTION 3: Composition/information on ingredients

| Chemical Name  | CAS No.   | Common name    | EC No.    | Weight-% |
|--|-----------|----------------|-----------|----------|
| Acetic acid, (ethylenedinitrilo)tetra-, disodium salt, | 6381-92-6 | Not applicable | -         | 1-5      |
| dihydrate  |           |                |           |          |
| acetic acid  | 64-19-7   | Not applicable | 200-580-7 | 3-7      |

We recommend handling all chemicals with caution.

# SECTION 4: First aid measures

# Description of first aid measures

| Skin contact       | Rinse skin with water. Immediate medical attention is not required.   |
|--------------------|---|
| Eye contact        | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.                        |
| Ingestion          | Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice. |
| Inhalation         | Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.      |
| Notes to Physician | Treat symptomatically.  |

## Most important symptoms and effects, both acute and delayed

H373 - May cause damage to organs through prolonged or repeated exposure

## Indication of any immediate medical attention and special treatment needed Get medical advice/attention if you feel unwell.

**SECTION 5: Firefighting measures** 

# Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical. No information available.

Special hazards arising from the substance or mixture Not known

Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation Always wear recommended Personal Protective Equipment Use personal protection equipment See section 8 for more information

#### **Environmental precautions**

No special environmental precautions required.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

# **Reference to other sections**

See section 8 for more information.

# Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

# Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

# Storage Conditions

Store at 15 °C to 25 °C

## Specific end use(s)

For research use only. Not for use in diagnostic procedures.

# SECTION 8: Exposure controls/personal protection

## Control parameters

| Chemical Name  | OSHA PEL             | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|--|----------------------|--------------------|-----------------|------------------|
| Acetic acid,   | None                 | None               | None            | None             |
| (ethylenedinitrilo)tetra-,<br>disodium salt, dihydrate |                      |                    |                 |                  |
| acetic acid  | 10 ppm               | None               | 10 ppm          | 15 ppm           |
|  | 25 mg/m <sup>3</sup> |                    |                 |                  |

| Chemical Name                       | Brazil - OEL - TWAs (LTs) | Brazil - OEL - Ceilings | Brazil - OEL - Skin Designations |
|-------------------------------------|---------------------------|-------------------------|----------------------------------|
| Acetic acid,                        | None                      | None                    | None                             |
| (ethylenedinitrilo)tetra-, disodium |                           |                         |                                  |
| salt, dihydrate                     |                           |                         |                                  |
| acetic acid                         | 8 ppm                     | None                    | None                             |
|                                     | 20 mg/m <sup>3</sup>      |                         |                                  |

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

## Exposure controls

#### **Personal Protective Equipment**

| Respiratory protection   | In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards. |
|--------------------------|---|
| Hand protection          | Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.   |
| Eye protection           | Tight sealing safety goggles.   |
| Skin and Body Protection | Wear suitable protective clothing.  |
| Hygiene Measures         | Handle in accordance with good industrial hygiene and safety practice   |

#### Environmental exposure controls

No special environmental precautions required.

# Information on basic physical and chemical properties

| Physical state<br>Color<br>Odor<br>Molecular Weight | liquid<br>No data<br>No data<br>No data |            |
|---|---|------------|
| Melting point / melting range                       | °C No data                              | °F No data |
| Boiling point / boiling range                       | °C No data                              | °F No data |
| Flammability (solid, gas)                           | No data                                 |            |
| Lower explosion limit                               | No data                                 |            |
| Upper explosion limit                               | No data                                 |            |
| Flash point   | °C No data                              | °F No data |
| Autoignition Temperature                            | °C No data                              | °F No data |
| Decomposition temperature                           | °C No data                              | °F No data |
| рН  | 6-8                                     |            |
| Evaporation rate                                    | No data                                 |            |
| Viscosity   | No data                                 |            |
| Solubility  | No data                                 |            |
| Partition coefficient:                              | No data                                 |            |
| n-octanol/water                                     |   |            |
| Vapor Pressure                                      | No data                                 |            |
| Specific gravity                                    | No data                                 |            |
| Relative density                                    | No data                                 |            |
| Vapor density                                       | No data                                 |            |
| Explosive properties                                | No data                                 |            |
| Oxidizing properties                                | No data                                 |            |
| Particle characteristics                            | No data                                 |            |

# Other information

## **Information with regard to physical hazard classes** No information available

# Other safety characteristics

No information available

|                                    | SECTION 10: Stability and reactivity                        |
|------------------------------------|---|
|                                    |   |
| Reactivity                         | None known.   |
| Chemical stability                 | Stable under normal conditions.                             |
| Possibility of hazardous reactions | Hazardous reaction has not been reported.                   |
| Conditions to avoid                | No information available.                                   |
| Incompatible materials             | No dangerous reaction known under conditions of normal use. |
| Hazardous decomposition products   | No data available.  |

# SECTION 11: Toxicological information

# Information on toxicological effects

| Chemical Name                       | Oral LD50          | Dermal LD50          | Inhalation LC50   |
|-------------------------------------|--------------------|----------------------|-------------------|
| Acetic acid,                        | No data available  | No data available    | No data available |
| (ethylenedinitrilo)tetra-, disodium |                    |                      |                   |
| salt, dihydrate                     |                    |                      |                   |
| acetic acid                         | = 3310 mg/kg (Rat) | = 1060 mg/kg(Rabbit) | =11.4mg/L(Rat)    |

Data are conclusive but insufficient for classification

# **Principal Routes of Exposure**

Aspiration hazard

| Acute toxicity   | Data are conclusive but insufficient for classification.            |
|--|---|
| Skin corrosion/irritation                                    | Data are conclusive but insufficient for classification             |
| Serious eye damage/irritatio                                 | nData are conclusive but insufficient for classification            |
| Respiratory or skin sensitization                            | Data are conclusive but insufficient for classification             |
| Specific target organ toxicit<br>(STOT) – single exposure    | y Data are conclusive but insufficient for classification           |
| Specific target organ toxicity<br>(STOT) – repeated exposure | y May cause damage to organs through prolonged or repeated exposure |
| Carcinogenicity  | Data are conclusive but insufficient for classification             |
| Germ cell mutagenicity                                       | Data are conclusive but insufficient for classification             |
| Reproductive toxicity  | Data are conclusive but insufficient for classification             |

# Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

| Chemical Name  | Toxicity to algae | Toxicity to daphnia<br>and other aquatic<br>invertebrates | Toxicity to fish  | Microtox Data     | log Pow           |
|--|-------------------|---|-------------------|-------------------|-------------------|
| Acetic acid,<br>(ethylenedinitrilo)tetra-,<br>disodium salt, dihydrate | No data available | No data available   | No data available | No data available | No data available |
| acetic acid  | No data available | Daphnia magna<br>EC50=65 mg/L (48 h)                      | No data available | No data available | logPow-0.17       |

| Mobility in soil | No information available. |
|------------------|---------------------------|
|                  |                           |

Persistence and degradability No information available.

**Bioaccumulative potential** No information available.

# Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## Other adverse effects

No information available.

SECTION 13: Disposal considerations

# Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

# SECTION 14: Transport information

# IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Not Applicable Not Applicable Not Applicable Not Applicable

# Environmental hazards Not Applicable

#### Special precautions for user Not Applicable

| SECTION 15: Regulator   | ry information |
|---|----------------|
| Component   | US TSCA        |
| Acetic acid, (ethylenedinitrilo)tetra-, disodium salt, dihydrate<br>6381-92-6 (1-5) | -              |
| acetic acid<br>64-19-7 ( 3-7 )  | Listed         |

# **US Federal Regulations**

# **SARA 313**

This product is not regulated by SARA.

# Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

# US State Regulations

| Chemical Name | Massachusetts - RTK | New Jersey - RTK | Pennsylvania - RTK |
|---------------|---------------------|------------------|--------------------|
|               | (Right-to-Know)     | (Right-to-Know)  | (Right-to-Know)    |
| acetic acid   | Listed              | Listed           | Listed             |

# **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

# **WHMIS Hazard Class**

Non-controlled

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.

# National Regulations - Brazil

| Chemical Name  | CAS No.   | Brazil - National Agency<br>for Sanitary Surveillance<br>(ANVISA) | Brazil - National List of<br>Carcinogen Agents to<br>Humans (LINACH) |
|--|-----------|---|--|
| Acetic acid,<br>(ethylenedinitrilo)tetra-,<br>disodium salt, dihydrate | 6381-92-6 | Not Listed  | Not Listed   |
| acetic acid  | 64-19-7   | Not Listed  | Not Listed   |

# SECTION 16: Other information

| Reason for revision | SDS sections updated. |
|---------------------|-----------------------|
| Revision number     | 10                    |

# **Revision date**

#### 05-Jun-2023

For research use only. Not for use in diagnostic procedures.

## **References**

- ECHA: http://echa.europa.eu/
- TOXNET: http://toxnet.nlm.nih.gov/
- eChemPortal: http://www.echemportal.org/
- LOLI database: https://www.chemadvisor.com/loli-database

# Abbreviations and acronyms

TWA - Time-Weighted Average

**OELs** - Occupational Exposure Limits

STEL - Short Term Exposure Limit

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**KECL** - Korean Existing and Evaluated Chemical Substances

ENCS - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

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

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

**CEPA** - Canadian Environmental Protection Act

**EPA** - Environmental Protection Agency

OSHA - Occupational Safety and Health Administration of the US Department of Labor

IATA - International Air Transport Association

**DOT** - Department of Transportation

**IMDG** - International Maritime Dangerous Goods

ACGIH - American Conference of Governmental Industrial Hygienists

NIOSH - National Institute for Occupational Safety and Health

AIHA - American Industrial Hygiene Association

HMIS - Department of Defense Hazardous Materials Information System

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED,INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

**End of Safety Data Sheet**