1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Tris-EDTA buffer
- **Article number:** 2012
- **Application of the substance / the preparation**
  Chemical for research, development, manufacturing and analysis
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
  Biosolve B.V.
  Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.
  Tel: +31-(0)40-2071300
  Fax: +31-(0)40-2048537
  Email: info@biosolve-chemicals.com

  Biosolve Chimie
  20 Rue Roger Husson, 57260 Dieuze, France
  info@biosolvechimie.com

  Bio-Lab Ltd.
  POB 34038, Jerusalem 91340, Israel
  Tel: +972 -2- 584 1111
  Fax: +972 -2- 584 1110
  Email: info@biolab-chemicals.com

- **Information department:** Product safety department
- **Emergency telephone number:** During normal opening times: +972 2 584 1111

2 Composition/information on ingredients

- **Chemical characterization: Substances**
  - CAS No. **Description**
    7732-18-5 water, distilled, conductivity or of similar purity
  - **Identification number(s)**
  - **EC number:** 231-791-2
- **Chemical characterization: Mixtures**
  - **Description:** Mixture of the substances listed below with nonhazardous additions.
  - **Dangerous components:** Void

3 Hazards identification

- **Classification of the substance or mixture**
  The product is not classified according to the Globally Harmonized System (GHS).

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**
  The product does not have to be labelled due to the calculation procedure of international guidelines.
- **Classification system:**
  The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
  Observe the general safety regulations when handling chemicals.
  The product is not subject to identification regulations according to directives on hazardous materials.

(Contd. on page 2)
4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

5 Firefighting measures

- **Suitable extinguishing agents:** CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**: No further relevant information available.
- **Protective equipment**: No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**: Not required.
- **Environmental precautions**: No special measures required.
- **Methods and material for containment and cleaning up**: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**: No dangerous substances are released.
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**: No special measures required.
- **Information about protection against explosions and fires**: No special measures required.
- **Storage**: No special requirements.
- **Information about storage in one common storage facility**: Not required.
- **Further information about storage conditions**: None.
- **Specific end use(s)**: No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems**: No further data; see item 7.
### 9 Physical and chemical properties

#### General Information
- **Appearance:**
  - Form: Fluid
  - Color: Colorless
  - Odor: Odorless
  - Odour threshold: Not determined.

#### pH-value at 20°C (68 °F):
- 8

#### Change in condition
- **Melting point/Melting range:** 0°C (32 °F)
- **Boiling point/Boiling range:** 100°C (212 °F)

#### Flash point:
- Not applicable.

#### Flammability (solid, gaseous):
- Not applicable.

#### Ignition temperature:
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.

#### Explosion limits:
- **Lower:** Not determined.
- **Upper:** Not determined.

#### Vapor pressure at 20°C (68 °F):
- 23 hPa (17 mm Hg)

#### Density at 20°C (68 °F):
- 0.99962 g/cm³ (8.342 lbs/gal)

#### Relative density
- Not determined.

#### Vapour density
- Not determined.

#### Evaporation rate
- Not determined.
34.0.2

· Solubility in / Miscibility with Water: Not miscible or difficult to mix.

· Segregation coefficient (n-octonol/water): Not determined.

· Viscosity:
  Dynamic: Not determined.
  Kinematic: Not determined.

· Solvent content:
  Organic solvents: 0.0 %

· Solids content: 0.2 %

· Other information No further relevant information available.

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:
  · Primary irritant effect:
    · on the skin: No irritant effect.
    · on the eye: No irritating effect.
  · Sensitization: No sensitizing effects known.

· Additional toxicological information:
  The product is not subject to classification according to internally approved calculation methods for preparations:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

· Aquatic toxicity: No further relevant information available.
· Persistence and degradability: No further relevant information available.
· Bioaccumulative potential: No further relevant information available.

· Additional ecological information:

· General notes: Generally not hazardous for water

13 Disposal considerations

· Waste treatment methods
  · Recommendation: Smaller quantities can be disposed of with household waste.

· Uncleaned packagings:
  · Recommendation: Disposal must be made according to official regulations.
### 14 Transport information

- **UN-Number**
  - DOT, ADR, ADN, IMDG, IATA: Void
- **UN proper shipping name**
  - DOT, ADR, ADN, IMDG, IATA: Void
- **Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA
  - Class: Void
- **Packing group**
  - DOT, ADR, IMDG, IATA: Void
- **Environmental hazards:**
  - Marine pollutant: No
- **Special precautions for user**
  - Not applicable.
- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
  - Not applicable.
- **UN "Model Regulation":** -

### 15 Regulatory information

- **Sara**
  - **Section 355 (extremely hazardous substances):** None of the ingredients is listed.
  - **Section 313 (Specific toxic chemical listings):** None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act):** All ingredients are listed.
- **Proposition 65**
  - **Chemicals known to cause cancer:** None of the ingredients is listed.
  - **Chemicals known to cause reproductive toxicity for females:** None of the ingredients is listed.
  - **Chemicals known to cause reproductive toxicity for males:** None of the ingredients is listed.
  - **Chemicals known to cause developmental toxicity:** None of the ingredients is listed.
- **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)** None of the ingredients is listed.
  - **IARC (International Agency for Research on Cancer)** None of the ingredients is listed.
  - **NTP (National Toxicology Program)** None of the ingredients is listed.
  - **TLV (Threshold Limit Value established by ACGIH)** None of the ingredients is listed.
Trade name: Tris-EDTA buffer

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

- Product related hazard informations:
  Observe the general safety regulations when handling chemicals.
  The product is not subject to identification regulations according to directives on hazardous materials.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing MSDS: Product safety department
- Contact: Product safety department
- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  ICAO: International Civil Aviation Organization
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)