

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 02/27/2012

Reviewed on 08/19/2010

## 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.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH 0 Health = 0  
FIRE 0 Fire = 0  
REACTIVITY 0 Reactivity = 0

## 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:** CO<sub>2</sub>, 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:**
- **Requirements to be met by storerooms and receptacles:** 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.

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- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

- |                                 |   |
|---------------------------------|---|
| · <b>General Information</b>    |   |
| · <b>Appearance:</b>            |   |
| Form:                           | Fluid   |
| Color:                          | Colorless                                     |
| Odor:                           | Odorless                                      |
| Odour threshold:                | Not determined.                               |
| pH-value at 20°C (68 °F):       | 8   |
| · <b>Change in condition</b>    |   |
| 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.                               |
| · <b>Ignition temperature:</b>  |   |
| Decomposition temperature:      | Not determined.                               |
| Auto igniting:                  | Product is not selfigniting.                  |
| Danger of explosion:            | Product does not present an explosion hazard. |
| · <b>Explosion limits:</b>      |   |
| 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/cm <sup>3</sup> (8.342 lbs/gal)     |
| Relative density                | Not determined.                               |
| Vapour density                  | Not determined.                               |
| Evaporation rate                | Not determined.                               |

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- |   |   |
|---|---|
| <b>· Solubility in / Miscibility with Water:</b>    | <i>Not miscible or difficult to mix.</i>          |
| <b>· Segregation coefficient (n-octanol/water):</b> | <i>Not determined.</i>                            |
| <b>· Viscosity:</b>                                 |   |
| <b>Dynamic:</b>                                     | <i>Not determined.</i>                            |
| <b>Kinematic:</b>                                   | <i>Not determined.</i>                            |
| <b>· Solvent content:</b>                           |   |
| <b>Organic solvents:</b>                            | <i>0.0 %</i>                                      |
| <b>Solids content:</b>                              | <i>0.2 %</i>                                      |
| <b>· Other information</b>                          | <i>No further relevant information available.</i> |

## 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.*

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## 14 Transport information

<b>· UN-Number</b>	Void
<b>· DOT, ADR, ADN, IMDG, IATA</b>	Void
<b>· UN proper shipping name</b>	
<b>· DOT, ADR, ADN, IMDG, IATA</b>	Void
<b>· Transport hazard class(es)</b>	
<b>· DOT, ADR, ADN, IMDG, IATA</b>	
<b>· Class</b>	Void
<b>· Packing group</b>	
<b>· DOT, ADR, IMDG, IATA</b>	Void
<b>· Environmental hazards:</b>	
<b>· Marine pollutant:</b>	No
<b>· Special precautions for user</b>	Not applicable.
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>· UN "Model Regulation":</b>	-

## 15 Regulatory information

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

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· **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)

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