

Material Safety Data Sheet

Printing date 03/17/2010

Reviewed on 03/11/2010

1 Identification of substance:

- **Product details:**
- **Trade name:** Liquichek Reticulocyte Control (A)
- **Catalog or product number:** 264, 265, 266, 265X
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
9500 Jeronimo Road
Irvine, California 92618-2017 1(949) 598-1200
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/Information on components:

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

- **Listing of dangerous and non-hazardous components:**

| | | |
|------------|-----------------------|----------|
| | Human Source Material | 50-100% |
| 10039-26-6 | D-Lactose monohydrate | 1.0-2.5% |

- **Additional information** Contains human sourced and/or potentially infectious components.

3 Hazards identification

- **Emergency overview:** not applicable
- **Routes of exposure:**
Ingestion
Inhalation
Skin
- **Information pertaining to particular dangers for man and environment**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system**
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0-4)**
Health = 0
Fire = 0
Reactivity = 0
- **Special Hazards** Contains human sourced and/or potentially infectious components.

4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact**
Immediately wash with water and soap and rinse thoroughly.
Generally the product does not irritate the skin.

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- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.
- **Information for doctor**
- **The following symptoms may occur:**
 - Skin irritation
 - Eye irritation
- **Medical conditions aggravated by exposure:** None expected.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Handle as potentially infectious.
- **Measures for environmental protection:**
Keep contaminated washing water and dispose of appropriately.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb liquid components with liquid-binding material.
Pick up mechanically.
Clean the affected area carefully; suitable cleaners are:
Disinfectant
Dispose contaminated material as waste according to item 13.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

64-17-5 ethanol

| | |
|--------|-----------------------------------|
| PEL () | 1900 mg/m ³ , 1000 ppm |
| REL () | 1900 mg/m ³ , 1000 ppm |
| TLV () | 1880 mg/m ³ , 1000 ppm |

- **Additional information:** The lists that were valid during the creation were used as basis.

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- **Personal protective equipment**
- **General protective and hygienic measures**
Follow the usual biosafety practices for handling potentially infectious materials.
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **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:** Safety glasses
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· **General Information**

| | |
|---------------|----------|
| Form: | liquid |
| Color: | Dark red |
| Odor: | Odorless |

· **Change in condition**

Melting point/Melting range: undetermined
Boiling point/Boiling range: 100°C

· **Flash point:** Not applicable

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water: Fully miscible

· **pH-value at 20°C:** 7.1 - 7.3

· **Solvent content:**

Organic solvents: 2.8 %

Solids content: 11.1 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions:** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

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11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
 The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
 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.

13 Disposal considerations

- **Product:**
- **Recommendation** Dispose of waste in accordance to applicable national, regional, or local regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

None of the ingredients is listed.

- **Section 313 (40CFR372.65):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

| | |
|-----------|-----------------------------------|
| 64-17-5 | ethanol |
| 7647-14-5 | sodium chloride |
| 9048-46-8 | Bovine Serum Albumin |
| 1132-61-2 | 4-morpholinopropanesulphonic acid |
| 50-99-7 | glucose |
| 77-92-9 | citric acid |
| 1310-73-2 | sodium hydroxide |
| 7732-18-5 | water |

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· California Proposition 65:

· Developmental Toxicity

64-17-5 ethanol

· 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)

64-17-5 ethanol

A4

· MAK (German Maximum Workplace Concentration)

64-17-5 ethanol

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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.

· Markings according to EU guidelines:

Observe the general safety regulations when handling chemicals

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).

· Safety phrases:

35 This material and its container must be disposed of in a safe way.

· National regulations

· Technical instructions (air):

| Class | Share in % |
|-------|------------|
| NK | 2.5-5 |

· Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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: Environmental Health and Safety.

· Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

*** Data compared to the previous version altered.**