1. Product and company identification

Product identifier

Trade name: Reagent Red Blood Cells for IH-System
This safety data sheet pertains to the following products:
814 010 100 IH-Cell A1,B 2 x 10 mL
814 020 100 IH-Cell A2 1 x 10 mL
814 030 100 IH-Cell I-II-III 3 x 10 mL
814 050 100 IH-Cell I-II 2 x10 mL
814 060 100 IH-Cell Pool 1 x10 mL
814 070 100 IH-Panel 11 11 x 4 mL
814 080 100 IH-Panel 11 Papain 11 x 4 mL
814 090 100 IH-Panel Plus 6 6 x 4 mL

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

General use: Use as laboratory reagent.
Only for industrial users.

Details of the supplier of the safety data sheet

Company name: Bio-Rad Medical Diagnostics GmbH
Street/POB-No.: Industriestr. 1
Postal Code, city: 63303 Dreieich
Germany
WWW: www.medizinische-diagnostik-dreieich.de
E-mail: contact.bmd@bio-rad.com
Telephone: +49 (0)6103-3130-0
Telefax: +49 (0)6103-3130-646
Dept. responsible for information:
Produktmanagement Transfusion
Telephone: 06103 3130-611
Telefax: 06103 3130-724

Emergency phone number

GIZ-Nord, Göttingen, Germany,
Telephone: +49 551-19240

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid
Form: liquid
Odor: No data available
Classification: This material is classified as not hazardous.

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Aqueous solution of anorganic salts and organic compounds.
Contains human source proteins

4. First aid measures

In case of inhalation: Provide fresh air. Seek medical treatment in case of troubles.

Following skin contact: Remove residues with water. Change contaminated clothing. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After swallowing: Rinse mouth and seek medical attention immediately.
Do not induce vomiting. Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

No data available

Information to physician

Treat symptomatically. Symptoms may occur with delay.

5. Fire fighting measures

Flash point/flash point range:
No data available

Auto-ignition temperature: not applicable

Suitable extinguishing media:
Water mist.
Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Extinguishing media which must not be used for safety reasons:
Full water jet

Specific hazards arising from the chemical

On heating or in case of fire toxic gases may form. In case of fire may be liberated: Nitrogen oxides (NOx), sulphur oxides, Carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:
Wear self-contained breathing apparatus. Wear appropriate protective equipment.

Additional information: Cool endangered containers with water spray and, if possible, remove from danger zone. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions: Avoid contact with the substance. Provide adequate ventilation. Wear personal protection equipment. Keep unprotected people away. Do not breathe vapor or spray.

Environmental precautions:
Do not allow to penetrate into soil, waterbodies or drains.

Methods for clean-up: Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Final cleaning.

7. Handling and storage

Handling

Advices on safe handling: Avoid contact with skin and eyes. Do not breathe vapors. Wear appropriate protective equipment.
Keep all containers, equipment and working place clean. Provide adequate ventilation, and local exhaust as needed.

Storage

Requirements for storerooms and containers:
Keep container tightly closed in a dry and well-ventilated place.

Hints on joint storage: Do not store together with: Strong oxidizing agents, peroxides and phenols.
Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Engineering controls

Provide good ventilation and/or an exhaust system in the work area.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Wear suitable protective clothing.
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: Nitrile rubber - Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: When vapors form, use respiratory protection. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

General hygiene considerations:
Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product.
Change contaminated clothing. After work, wash hands and face.
Do not inhale substance. Have eye wash bottle or eye rinse ready at work place.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Physical state at 68 °F and 101.3 kPa: liquid
Form: liquid

Odor: No data available

Odor threshold: No data available

pH value: No data available

Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	not applicable
Explosion limits:	LEL (Lower Explosion Limit): not applicable UEL (Upper Explosive Limit): not applicable
Vapor pressure:	No data available
Vapor density:	No data available
Density:	No data available
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	not applicable
Thermal decomposition:	No data available
Explosive properties:	not applicable

10. Stability and reactivity

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions
No hazardous reactions known.

Conditions to avoid: Protect against heat /sun rays.

Incompatible materials: Strong oxidizing agents, peroxides and phenols.

Thermal decomposition: No data available

11. Toxicological information

Toxicological tests

Toxicological effects: Acute toxicity (oral): Lack of data.
Acute toxicity (dermal): Lack of data.
Acute toxicity (inhalative): Lack of data.
Skin corrosion/irritation: Lack of data.
Serious eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Lack of data.
Germ cell mutagenicity/Genotoxicity: Lack of data.
Carcinogenicity: Lack of data.
Reproductive toxicity: Lack of data.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): Lack of data.
Specific target organ toxicity (repeated exposure): Lack of data.
Aspiration hazard: Lack of data.

12. Ecological information

Ecotoxicity

Further details: No data available

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

General information: Do not allow to penetrate into soil, waterbodies or drains.

13. Disposal considerations

Product

Recommendation: Small quantities can be disposed of with the domestic waste or burnt, with due observance of regulations of local authorities. Large quantities are hazardous waste and must be disposed of accordingly.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.
Non-contaminated packages may be recycled.

14. Transport information

USA: Department of Transportation (DOT)

Proper shipping name: Not restricted

Sea transport (IMDG)

Proper shipping name: Not restricted
Marine pollutant: no

Air transport (IATA)

Proper shipping name: Not restricted

Further information

No dangerous good in sense of these transport regulations.

15. Regulatory information

National regulations - U.S. Federal Regulations

Human red blood cells:	TSCA: not listed
Sodium chloride:	TSCA Inventory: listed TSCA HPVC: not listed
Citric acid monohydrate:	TSCA Inventory: not listed TSCA listed: Citric acid anhydrous CAS 77-92-9
Trisodium citrate - 2-hydrate:	TSCA Inventory: not listed TSCA listed: Trisodium citrate, anhydrous CAS No. 68-04-2
Glucose:	TSCA Inventory: listed TSCA HPVC: not listed
myo-Inositol:	TSCA Inventory: listed TSCA HPVC: not listed
Chloramphenicol:	TSCA Inventory: listed TSCA HPVC: not listed Carcinogen Status: IARC Rating: Group 2A OSHA Carcinogen: not listed NTP Rating: not listed
Neomycin sulfate:	TSCA Inventory: listed; EPA flags XU TSCA HPVC: not listed
Adenin:	TSCA Inventory: listed TSCA HPVC: not listed
Amphotericin B:	TSCA Inventory: not listed

National regulations - U.S. State Regulations

Product:	California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.
Neomycin sulfate:	California Proposition 65: developmental Rhode Island HSL: listed

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

National regulations - Great Britain

Hazchem-Code: -

16. Other information

Hazard rating systems:

NFPA Hazard Rating:
Health: 1 (Slight)
Fire: 0 (Minimal)
Reactivity: 0 (Minimal)

HMIS Version III Rating:
Health: 1 (Slight)
Flammability: 0 (Minimal)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

Reason of change: General revision
Date of first version: 4/8/2015

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.