

Date of issue: 08.06.2007 Replaces Data Sheet of : 02.07.2002

"*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available



1 Identification of Substance / Preparation and Company

1.1 Identification of Substance or Preparation

Trade Name : Resuspension Buffer R

Article No. : n.av.

Preparation No. : n.av.

Registration No. : n.ap.

1.2 Use of the substance / preparation:

Analytics, Diagnostics

1.3 Company / Supplier Identification

1.3.1 Address of the Company / Supplier:

INVITEK GES. FÜR BIOTECHNIK & BIODESIGN MBH, Robert-Rössle-Straße 10, D - 13125 Berlin

Telephone : +49-30-94 89-3796, Fax : +49-30-94 89-3795, e-mail:

1.3.2 Responsible :

Chemie & Vorschrift, Kannheideweg 35, D-53123 Bonn-Duisdorf; E-Mail: info@chemie-vorschrift.de

1.4 Emergency - Telephone

Information Centre Specialising in Symptoms of Poisoning

Telephone : +49 - 761 - 19 240

Emergency - Telephone of Company / Undertaking

Telephone : +49-30-94 89-3796 (08:30 - 16:30)

2 Hazards Identification

2.1 For Humans (additional information is given under item 11) :

No special dangers known.

2.2 For the Environment :

None.

2.3 For Materials:

None.

3 Composition / Information on Ingredients

3.1 Chemical Characterisation:

Aqueous solution of buffers

3.2 Dangerous Ingredients:

CAS - No.	Index - No.	EEC - No.	Material	m% - range	Symbol R - phrases
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Remarks: Classification and labelling of a product is indicated under item 15.

4 First Aid Measures

4.1 Inhalation:

None.

4.2 Skin Contact :

None.

4.3 Eye Contact :

None.

4.4 Ingestion :

None.

4.5 Note to Physician:

None.

4.6 Special Equipment:

None.

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5 Fire Fighting Measures

- 5.1 **Suitable Extinguishing Media :** This material is not combustible; use extinguishing media appropriate for surrounding fire.
- 5.2 **Extinguishing Media to Avoid :** None.
- 5.3 **Fire and Explosion Hazards :** None.
- 5.4 **Special Protective Equipment :**
 Wear positive pressure self-contained breathing apparatus.
 Wear full protective clothing.
- 5.5 **Additional Information :** None.

6 Accidental Release Measures

- 6.1 **Personal Precautions :**
 See No. 8.3 Personal Protective Equipment.
- 6.2 **Environmental Precautions and Methods for Cleaning up :**
 None.
- 6.3 **Further Information :** None.

7 Handling and Storage (For national regulations refer to item 15.2)

- 7.1 **Handling**
 - 7.1.1 **Precautions for Safe Handling :**
 No special measures necessary
 - 7.1.2 **Precautions in Case of Fire and Explosion :**
 None.
- 7.2 **Storage**
 - 7.2.1 **Storage Instructions :**
 None.
 - 7.2.2 **Store away from :**
 None.
 - 7.2.3 **Further Information on Storage Conditions :**
 None.
- 7.3 **Specific use(s):** None.

8 Exposure Controls and Personal Protection

- 8.1 **Exposure limit values :**

Material	Limit Value :
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- 8.2 **Exposure controls**
 - 8.2.1 **Occupational exposure controls:**
 None.
 - 8.2.1a **Respiratory Protection :** No.
 - 8.2.1b **Hand Protection :** No.
 - 8.2.1c **Eye Protection :** No.
 - 8.2.1d **Skin Protection :** No.
 - 8.2.1e **Further Information :** Refer to special restrictions in wearing protective equipment
 - 8.2.2 **Environmental exposure controls:** n.av.

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Telephone : +49-30-94 89-3796, **Date of issue:** 08.06.2007 **Replaces Data Sheet of :** 02.07.2002**9 Physical and Chemical Properties****9.1 Appearance**9.1.1 **Form** : liquid 9.1.2 **Colour** : colourless 9.1.3 **Odour** : odourless**9.2 Safety Relevant Data**

9.2.1 pH-value, undiluted : 7, pH-value, 1% aqueous solution : 7
 9.2.2 Boiling point / Boiling - range (°C) : 100, Melting point / Melting range (°C) : 0
 9.2.3 Flash point (°C, c.c.) : n.ap.
 9.2.4 Flammability (EEC A10/A13) : n.ap.
 9.2.5 Ignition temperature (°C) : n.ap.
 9.2.6 Autoflammability (EEC A16) : n.ap.
 9.2.7 Oxidising properties : None.
 9.2.8 Explosion hazard : No.
 9.2.9 Explosion limits (Vol.%) lower : None., upper : None.
 9.2.10 Vapour pressure : n.av.
 9.2.11 Density (g/ml) : 1
 9.2.12 Solubility (in Water) : miscible
 9.2.13 Partition coefficient, n-Octanol/Water : n.ap.
 9.2.14 Viscosity : n.av.
 9.2.15 Solvent separation test : n.ap.
 9.2.16 Solvent content (m %) : n.ap.

9.3 Further Data

9.3.1 Thermal decomposition (°C) : None.
 9.3.2 Vapour density (Air = 1) : n.ap.
 9.3.3 Evaporation rate : n.av.

10 Stability and Reactivity

10.1 **Conditions to Avoid** :
No special measures necessary if used correctly.
 10.2 **Materials to Avoid** :
None.
 10.3 **Hazardous Decomposition Products** :
No dangerous decomposition products when properly handled.
 10.4 **Further Information** :
None.

11 Toxicological Information**11.1 Toxicological Tests :****11.1.1 Acute Health Effects :**

Inhalation, LC₅₀ rat, (mg/l/4h) : n.av.
 Ingestion, LD₅₀ rat, (mg/kg) : > 5.000
 Skin - contact, LD₅₀ rat, (mg/kg) : n.ap.
 Irritation (to skin / eye) : No.
 Sensitisation : No.

11.1.2 Subacute / Chronic Toxicity :

Carcinogenicity : No.
 Mutagenicity : No.
 Teratogenicity : No.
 Narcotic Effects : None.

11.2 Practical Experience

11.2.1 Observations relevant for classification :
None.
 11.2.2 Further Observations :
Frequent or permanent contact to skin may lead to irritation or dermatitis.

11.3 General Remarks :

Classification of the preparation has been done by calculation in accordance with EEC directives.

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12 Ecological Information

- 12.1 **Ecotoxicity :**
n.ap.
- 12.2 **Mobility :**
n.av.
- 12.3 **Persistence and degradability:**
n.ap.
- 12.4 **Bioaccumulative potential:**
n.av.
- 12.5 **Results of PBT assessment**
n.av.
- 12.6 **Other Ecological Information**
 - 12.6.1 COD-Value, mg/g : n.ap.
 - 12.6.2 BOD₅-Value, mg/g : n.ap.
 - 12.6.3 AOX-Remarks : n.ap.
 - 12.6.4 Significant Components : None.
 - 12.6.5 Other adverse effects : None.

13 Disposal Considerations (For national Regulations refer to item 15.)

- 13.1 **Residues**
- 13.1.1 Recommendation : n.ap. Waste - Code - No. : n.ap.
In addition comply with the regional authorities.
- 13.1.2 Safe Handling: See item 7 and 15.
- 13.2 **Contaminated Packaging**
- 13.2.1 Recommendation : Wash with suitable cleaner. Otherwise as described under Residues.
- 13.2.2 Safe Handling : As described under Residues.

14 Transport Information

- 14.1 **Transportation by Road or Railway according to ADR and RID**

Remarks : No dangerous goods according to ADR
Name and Description:

Class :	UN - No :	Risklabel:
Classification Code:	Packing Group :	Hazard-No.:
Transport-category:	Limited Quantity:	
- 14.2 **Classification for Transportation by Inland-Navigation according to ADNO**
Remarks : Classification has not been done.
 Class : Division : Category :
 - 14.2.1 **Description of Goods :**
 - 14.2.2 **Remarks :**
- 14.3 **Classification for Transportation by Vessels according to IMDG**
Remarks : No dangerous goods according to IMDG

Class :	UN-No. :	Packing Group :
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 - 14.3.1 **EmS-No. :**
 - 14.3.2 **Marine Pollutant :**
 - 14.3.3 **Instruction for Declaration and Labelling :**
Proper Shipping Name :
Risk Label :
 - 14.3.4 **Remarks :**

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14.4 Classification for Transportation by Aeroplane according to IATA-DGR/ICAO-TI

Remarks : No dangerous goods according to IATA-DGR

Class : UN-No. : Packing Group :

14.4.1 Instruction for Declaration and Labelling :

Proper Shipping Name :

Risk Label :

Packing Instructions, Passenger : Cargo :

14.4.2 Remarks :

15 Regulatory Information

15.1 Classification according to EEC-Regulations :

Classification required by EEC : No.

Applicable Exemptions :

Hazard Identification :

Hazard Symbol(s) :

Component(s) :

R-Phrases :

S-Phrases :

Additional Markings :

15.1.1 The above mentioned labelling is valid for distribution to industrial user.

Labelling (formats, exemptions, additional markings) has to be done according to respective regulations.

15.2 National Regulations (Valid for Germany only)

15.2.1 **Beschäftigungsbeschränkung nach MuSchG / JArbSchG beachten :** No.

15.2.2 **Aufbewahrungspflicht nach § 8 (6) GefStoffV beachten :** No.

15.2.3 **Störfallverordnung beachten :** No.

15.2.4 **Technische Anleitung Luft :** Klasse Ziffer Anteil m%
n.ap.

15.2.5 **Wassergefährdungsklasse :** nwg (KBwS-Classification)

15.2.6 **Lagerklasse :** 12 (VCI - Konzept)

15.2.7 **Regelungsbereich der TRGS 514 beachten :** No.

15.2.8 **Regelungsbereich der TRGS 515 beachten :** No.

15.2.9 **Regelungsbereich der TRG 300 beachten :** No.

15.2.10 **Regelungsbereich des WRMG beachten :** No.

15.2.11 **Gesundheitsschädlich i.S.d. § 2 Abs. 3 der Verpackungsverordnung :**No.

15.2.12 **Sonstige zu beachtende Vorschriften :** None.

16 Other Information

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

Prepared by : Chemie & Vorschrift, Kannheideweg 35, D-53123 Bonn-Duisdorf, (+49-228-74 81 824

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