

Date of issue: 10.06.2005 Replaces Data Sheet of: –

"" 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: Binding Buffer B6

Article No.: –

Component of: GenoType DNA Isolation Kit

### 1.2 Use of the substance / preparation:

Analytics, Diagnostics

### 1.3 Company / Supplier Identification

#### 1.3.1 Address of the Company / Supplier:

Hain Lifescience GmbH, Hardwiesenstr. 1, D – 72147 Nehren

Telephone: +49 (0)-30-94 89-3796, Fax: +49-30-94 89-3795

### 1.4 Emergency - Telephone

Informing Department Emergency-Telephone of Company / Undertaking

Telephone: +49 (0) 7473 / 9451 – 30 Telephone: +49 (0) 7473 / 9451 – 0

## 2 Composition / Information on Ingredients

### 2.1 Chemical Characterisation:

Alcoholic solution of inorganic buffer

### 2.2 Dangerous Ingredients:

CAS - No.	Index - No.	EEC - No.	Material	m% - range	Symbol	R - phrases
67-63-0	603-117-00-0	200-661-7 2-	Propanol	50 - 100%	F, Xi R	11-36-67

Remarks: Classification and labelling of a product is indicated under item 15.

## 3 Hazards Identification

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

Highly flammable. May form explosive vapour-air mixture. Degreases skin. Irritating to eyes. Vapours may cause drowsiness and dizziness.

### 3.2 For the Environment:

Product may soil public waters by raising overall contamination.

### 3.3 For Materials: None.

## 4 First Aid Measures

### 4.1 Inhalation:

After inhalation of product / fumes of fire leave contaminated area and provide for fresh air.

In the event of symptoms occurring, seek medical treatment.

### 4.2 Skin Contact:

Wash away with water.

In the event of symptoms occurring, seek medical treatment.

### 4.3 Eye Contact:

Flush eyes out immediately with large amounts of water with eye lids lifted.

If irritation persists consult physician.

### 4.4 Ingestion:

Rinse mouth out and drink plenty of water.

Consult physician.

### 4.5 Note to Physician:

Symptomatic treatment.

### 4.6 Special Equipment:

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n.av.

## 5 Fire Fighting Measures

**5.1 Suitable Extinguishing Media: Water spray jet, foam, dry chemicals, CO<sub>2</sub>.**

**5.2 Extinguishing Media to Avoid: None.**

**5.3 Fire and Explosion Hazards:**

In case of fire, product may form: Organic crackproducts and carbon oxides.

**5.4 Additional Information: None.**

**5.5 Special Protective Equipment:**

Wear positive pressure self-contained breathing apparatus.

Wear full protective clothing.

## 6 Accidental Release Measures

**6.1 Personal Precautions:**

See No. 8.3 Personal Protective Equipment. Keep away from sources of ignition.

**6.2 Environmental Precautions and Methods for Cleaning up:**

Do not allow larger quantities to enter drainage. Inform responsible authorities after accidental conduction of larger quantities. Soak up with absorbent material. Flush away residues with water.

**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:

Keep container tightly closed. Close container straight after use or if empty.

7.1.2 Precautions in Case of Fire and Explosion:

Keep away from sources of ignition, do not smoke. Vapours may form an explosive mixture with air.

**7.2 Storage**

7.2.1 Storage Instructions:

Floor must be resistant against solvents.

7.2.2 Store away from:

Store away from explosive substances and products, oxidizers.

7.2.3 Further Information on Storage Conditions:

Provide sufficient ventilation. Protect from sun. Protect from warming up / overheating.

7.2.4 Storage Class: 3A (VCI - Concept)

## 8 Exposure Controls and Personal Protection

**8.1 Information on System Design:**

Provide for sufficient exhaustion. Provide personal protective equipment.

**8.2 Exposure Limits:**

8.2.1	Material	Limit Value:
	2-Propanol	OEL 200 ppm

**8.3 Personal Protective Equipment**

8.3.1 General Protection and Hygiene:

Avoid contact with eyes and skin. Do not eat, drink or smoke during work. Take off contaminated, saturated clothing immediately. Do not inhale vapours.

8.3.2 Respiratory Protection: If ventilation is insufficient, wear respiratory protection (Short term: Filter A)

8.3.3 Hand Protection: In case of prolonged skin contact use protective gloves.

8.3.4 Eye Protection: Goggles

8.3.5 Skin Protection: No.

8.3.6 Further Information: Refer to special restrictions in wearing protective equipment

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## 9 Physical and Chemical Properties

### 9.1 Appearance

9.1.1 Form: liquid                      9.1.2 Colour: colourless                      9.1.3 Odour: alcohol-like

### 9.2 Safety Relevant Data

9.2.1 pH-value, undiluted: n.av., pH-value, 1% aqueous solution: n.av.  
9.2.2 Boiling point / Boiling - range (°C): ~ 85, Melting point / Melting range (°C): n.av.  
9.2.3 Flash point (°C, c.c.): ~ 15  
9.2.4 Flammability (EEC A10/A13): No.  
9.2.5 Ignition temperature (°C): n.av.  
9.2.6 Autoflammability (EEC A16): None.  
9.2.7 Oxidising properties: No.  
9.2.8 Explosion hazard: No.  
9.2.9 Explosion limits (Vol.%) lower: 2, upper: 12  
9.2.10 Vapour pressure: 41,6 mbar (20°C)  
9.2.11 Density (g/ml): ~ 0,9  
9.2.12 Solubility (in Water): miscible Soluble in: most organic solvents.  
9.2.13 Partition coefficient, n-Octanol/Water: n.av.  
9.2.14 Viscosity: n.av.  
9.2.15 Solvent separation test: n.av.  
9.2.16 Solvent content (m %): 60 - 90

### 9.3 Further Data

9.3.1 Thermal decomposition (°C): n.av.  
9.3.2 Vapour density (Air = 1): Vapours are heavier than air.  
9.3.3 Evaporation rate: n.av.

## 10 Stability and Reactivity

### 10.1 Conditions to Avoid:

Sparks, flames, static charge

### 10.2 Materials to Avoid:

Contact with oxidizers may lead to strong reactions.

### 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): n.av.  
Skin - contact, LD50 rat, (mg/kg): n.av.  
Irritation (to skin / eye): n.av.  
Sensitisation: n.av.

#### 11.1.2 Subacute / Chronic Toxicity:

Carcinogenicity: n.av.  
Mutagenicity: n.av.  
Teratogenicity: n.av.  
Narcotic Effects: Inhalation of solvent-vapours in high concentration causes narcotic effects.

### 11.2 Practical Experience

11.2.1 Observations relevant for classification: None.

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11.2.2 Further Observations: None.

**11.3 General Remarks:**

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

**12 Ecological Information**

**12.1 Ecotoxic Effects, Aquatic Toxicity:**

According to present knowledge no negative ecological reactions are to be expected.

**12.2 Behaviour in Sewage Works:**

Mobility and Accumulation Potential: n.av.

**12.3 Elimination (Persistence and Degradability):**

The product is biodegradable.

**12.4 Other Ecological Information**

- 12.4.1 COD-Value, mg/g: n.av.
- 12.4.2 BOD5-Value, mg/g: n.av.
- 12.4.3 AOX-Remarks: n.ap.
- 12.4.4 Significant Components: Not relevant
- 12.4.5 Other adverse effects: None.

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

**13.1 Residues**

13.1.1 Recommendation: D 10 / R 4 Waste - Code - No.: 07 06 04

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:**

Class: 3 Classification Code: F1 Packing Group: II  
 Hazard-No.: 33 UN-No.: 1219

14.1.1 Instruction Concerning Shipper's Declaration and Packaging:

<b>Volume or Mass</b>	<b>Name and Description</b>	<b>Risklabel Packing – Code or instruction</b>
5 ml, 30 ml, 50 ml Inner max. 30 l per box	UN 1219 Isopropanol-solution	n.ap. --/4G

**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:**

Class: 3 UN-No.: 1219 Packing Group: II

14.3.1 EmS-No.: F-E; S-D

14.3.2 Marine Pollutant: No.

14.3.3 Instruction for Declaration and Labelling:  
 (Packing sizes with possible exemptions not considered)

**Proper Shipping Name:** Isopropanol-solution

**Risk Label:** Flammable Liquid

14.3.4 Remarks: None.

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

# Safety Data Sheet in Accordance with 91/155/EEC

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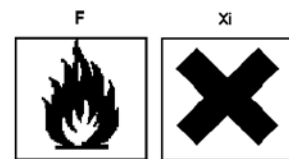
<b>Remarks:</b>		
Class: 3	UN-No.: 1219	Packing Group: II
14.4.1	Instruction for Declaration and Labelling: (Packing sizes with possible exemptions not considered) <b>Proper Shipping Name:</b> Isopropanol-Solution <b>Risk Label:</b> Flammable Liquid	
14.4.2	Packing Instructions	Passenger: 305 Cargo: 307
	Remarks: None.	

## 15 Regulatory Information

### 15.1 Classification according to EEC-Regulations:

Classification required by EEC: Yes.  
Hazard Identification: Highly flammable & Irritant  
Component(s):

Applicable Exemptions: Yes.  
Hazard Symbol(s):



#### R-Phrases:

R 11: Highly flammable.  
R 36: Irritating to eyes.  
R 67: Vapours may cause drowsiness and dizziness.

#### S-Phrases:

(S 2: Keep out of reach of children.)  
S 7: Keep container tightly closed.  
S 16: Keep away from sources of ignition - No smoking.  
S 24 / 25: Avoid contact with skin and eyes.  
S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### 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:	Yes.	
15.2.2	Aufbewahrungspflicht nach § 8 (6) GefStoffV beachten:	Yes.	
15.2.3	Störfallverordnung beachten:	Yes.	
15.2.4	Technische Anleitung Luft: Klasse	Ziffer	Anteil m%
		5.2.5	75 - 90%
15.2.5	Wassergefährdungsklasse: 1 (Classification according to VwVwS)		
15.2.6	Regelungsbereich der TRGS 514 beachten:	No.	
15.2.7	Regelungsbereich der TRGS 515 beachten:	No.	
15.2.8	Regelungsbereich der TRG 300 beachten:	No.	
15.2.9	Regelungsbereich des WRMG beachten:	Yes.	
15.2.10	Gesundheitsschädlich i.S.d. § 2 Abs. 3 der Verpackungsverordnung:	Yes.	
15.2.11	Sonstige zu beachtende Vorschriften:	No.	

## 16 Other Information

### Text of R phrases mentioned in Section 2

R 11: Highly flammable.  
R 36: Irritating to eyes.  
R 67: Vapours may cause drowsiness and dizziness.

This Material Safety Data Sheet relates to 2001/58/EEC and TRGS 220.

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.