


## SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Europe

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name	<b>RNase A solution; part of 'MicroCal™ VP-DSC Test Kit (RNase)'</b>	
Catalogue Number	KIT100010	 9 0 K I T 1 0 0 1 0
Product description		
Product type	Liquid.	
Other means of identification	Not available.	

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

Analytical chemistry. Laboratory chemicals Research and Development

#### 1.3 Details of the supplier of the safety data sheet

<u>Supplier</u>	GE Healthcare UK Ltd Amersham Place Little Chalfont Buckinghamshire HP7 9NA England +44 0870 606 1921	<b>Hours of operation</b> 08.30 - 17.00
<b>Person who prepared the MSDS:</b> msdslifesciences@ge.com		

<b>Europe</b>	GE Healthcare Bio-Sciences GmbH Munzinger Strasse 5 D-79111 Freiburg Germany / Deutschland
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**1.4 Emergency telephone number**  
+49 0761 4543 0

#### National advisory body/Poison Centre

<b>Europe</b>	<a href="http://www.who.int/ipcs/poisons/centre/directory/euro/en/">http://www.who.int/ipcs/poisons/centre/directory/euro/en/</a>
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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Product definition

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

Supplemental label elements	Not applicable.
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#### Special packaging requirements



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**Containers to be fitted with child-resistant fastenings** Not applicable.

**Tactile warning of danger** Not applicable.

## 2.3 Other hazards

**Other hazards which do not result in classification** Not available.

## SECTION 3: Composition/information on ingredients

Substance/mixture

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** If inhaled, remove to fresh air. Get medical attention if symptoms appear.

**Skin contact** Wash with soap and water. Get medical attention if irritation develops.

**Ingestion** Do not ingest. Get medical attention if symptoms appear.

**Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

**Eye contact** No known significant effects or critical hazards.

**Inhalation** No known significant effects or critical hazards.

**Skin contact** No known significant effects or critical hazards.

**Ingestion** No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** No specific data.

**Inhalation** No specific data.

**Skin contact** No specific data.

**Ingestion** No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

**Notes to physician** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** None known.

### 5.2 Special hazards arising from the substance or mixture

**Hazards from the substance or mixture** In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustion products** No specific data.

### 5.3 Advice for firefighters

**Special precautions for fire-fighters** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.



**Special protective equipment for fire-fighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

For emergency responders

### 6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

**Small spill**

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill**

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

### 6.4 Reference to other sections

See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

**Protective measures**

**Advice on general occupational hygiene**

### 7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: -40 to -20°C (-40 to -4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

### 7.3 Specific end use(s)

**Recommendations**

Analytical chemistry. Laboratory chemicals Research and Development

**Industrial sector specific solutions**

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

**Occupational exposure limits**

No exposure limit value known.

**Recommended monitoring procedures**

Product does not contain relevant quantities of materials with exposure values that have to be monitored.

**Derived effect levels**

No DELs available.

**Predicted effect concentrations**

No PECs available.

### 8.2 Exposure controls



<b>Appropriate engineering controls</b>	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
<b>Individual protection measures</b>	
<b>Hygiene measures</b>	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Eye/face protection</b>	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
<b>Skin protection</b>	
<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
<b>Body protection</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Other skin protection</b>	
<b>Respiratory protection</b>	A respirator is not needed under normal and intended conditions of product use.
<b>Environmental exposure controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	Not available.
<b>pH</b>	5.5
<b>Melting point/freezing point</b>	
<b>Initial boiling point and boiling range</b>	
<b>Flash point</b>	
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Burning time</b>	Not applicable.
<b>Burning rate</b>	
<b>Upper/lower flammability or explosive limits</b>	Not available.
<b>Vapour pressure</b>	
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	Not available.
<b>Auto-ignition temperature</b>	
<b>Decomposition temperature</b>	
<b>Viscosity</b>	
<b>Explosive properties</b>	Not considered to be a product presenting a risk of explosion.
<b>Oxidising properties</b>	Not available.

### 9.2 Other information

No additional information.



## SECTION 10: Stability and reactivity

### 10.1 Reactivity

**10.2 Chemical stability** The product is stable.

### 10.3 Possibility of hazardous reactions

**10.4 Conditions to avoid** No specific data.

**10.5 Incompatible materials** No specific data.

**10.6 Hazardous decomposition products** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

**Conclusion/Summary** Not available.

#### Irritation/Corrosion

**Conclusion/Summary** Not available.

#### Sensitiser

**Conclusion/Summary** Not available.

#### Mutagenicity

**Conclusion/Summary** Not available.

#### Carcinogenicity

**Conclusion/Summary** Not available.

#### Reproductive toxicity

**Conclusion/Summary** Not available.

#### Teratogenicity

**Conclusion/Summary** Not available.

#### Information on the likely routes of exposure

#### Potential acute health effects

**Inhalation** No known significant effects or critical hazards.

**Ingestion** No known significant effects or critical hazards.

**Skin contact** No known significant effects or critical hazards.

**Eye contact** No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation** No specific data.

**Ingestion** No specific data.

**Skin contact** No specific data.

**Eye contact** No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure

**Potential immediate effects**

**Potential delayed effects**

##### Long term exposure

**Potential immediate effects**

**Potential delayed effects**

#### Potential chronic health effects

Not available.

**Conclusion/Summary** Not available.



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General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.
Other information	

## SECTION 12: Ecological information

### 12.1 Toxicity

Conclusion/Summary Not available.

### 12.2 Persistence and degradability

Conclusion/Summary Not available.

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

Soil/water partition coefficient ( $K_{oc}$ ) Not available.

Mobility Not available.

### 12.5 Results of PBT and vPvB assessment

PBT

vPvB

12.6 Other adverse effects No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

#### Product

##### Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

##### Hazardous waste

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

#### Packaging

##### Methods of disposal

##### Special precautions

## SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	Not regulated.		Not regulated.	Not regulated.
14.2 UN proper shipping name	-		-	-



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14.3 Transport hazard classes)	-		-	-
14.4 Packing group	-		-	-
14.5 Environmental hazards				
14.6 Special precautions for user				
Additional information	-		-	-

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** Not applicable.

Other EU regulations

**Europe inventory** All components are listed or exempted.

**Aerosol dispensers**

International regulations

**Chemical Weapons Convention List Schedule I Chemicals** Not listed

**Chemical Weapons Convention List Schedule II Chemicals** Not listed

**Chemical Weapons Convention List Schedule III Chemicals** Not listed

### 15.2 Chemical Safety Assessment

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

### Abbreviations and acronyms

ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	



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<b>Full text of abbreviated H statements</b>	Not applicable.
<b>Full text of classifications [CLP/GHS]</b>	Not applicable.
<b>Full text of abbreviated R phrases</b>	Not applicable.
<b>Full text of classifications [DSD/DPD]</b>	Not applicable.
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**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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