Material Safety Data Sheet

Canada English

Section 1. Chemical product and company identification

Product name MES buffer; part of 'MicroCal™ VP-ITC Test Kit

(EDTA)

Catalogue Number KIT240010

Material uses Industrial applications: Analytical chemistry. Research.

Liquid. Product type Validation date 17 May 2011 Print date 17 May 2011

Supplier GE Healthcare UK Ltd Amersham Place Little Chalfont

Buckinghamshire HP7 9NA

England

+44 0870 606 1921

In case of emergency ChemTrec (US) 1-800-424-9300

Canada ChemTrec (US) 1-703-527-3887

Hazards identification 2.

Physical state Liquid. Odorless Odor

Emergency overview

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED

INSTRUCTIONS FOR USE ARE FOLLOWED.

Precautionary measures

Dermal contact. Eye contact. Inhalation. Ingestion. Routes of entry

Potential acute health effects

No known significant effects or critical hazards. Eves Skin No known significant effects or critical hazards. Inhalation No known significant effects or critical hazards. No known significant effects or critical hazards. Ingestion

Potential chronic health effects

Chronic effects No known significant effects or critical hazards. No known significant effects or critical hazards. Carcinogenicity No known significant effects or critical hazards. Mutagenicity **Teratogenicity** No known significant effects or critical hazards. No known significant effects or critical hazards. **Developmental effects** No known significant effects or critical hazards. Fertility effects

Not available. **Target organs**

Over-exposure signs/symptoms

Inhalation No specific data. Ingestion No specific data. No specific data. Skin No specific data. Eyes None known.

Medical conditions aggravated by

over-exposure

See toxicological information (Section 11)



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3. Composition/information on ingredients

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 Eye contact

minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin contact Wash with soap and water. Get medical attention if irritation develops. Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms appear.

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

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

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large Notes to physician

quantities have been ingested or inhaled.

Section 5. Fire-fighting measures

Flammability of the product In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Use an extinguishing agent suitable for the surrounding fire. Suitable

None known Not suitable

Special exposure hazards 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.

Hazardous combustion products

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.

Section 6. Accidental release measures

Personal precautions No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding

areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled

material. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions Avoid dispersal of spilled 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).

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, Methods for cleaning up 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 (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information

and section 13 for waste disposal.

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.

Section 7. Handling and storage

Handling Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be

prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment

before entering eating areas.

Store between the following temperatures: 4 to 25°C (39.2 to 77°F). Store in accordance with local Storage

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 unlabeled containers. Use appropriate containment to avoid

environmental contamination.

Section 8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

Engineering measures

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

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.



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Hygiene measures 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.

Personal protection

Skin

A respirator is not needed under normal and intended conditions of product use. Respiratory

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times Hands

when handling chemical products if a risk assessment indicates this is necessary.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates Eyes this is necessary to avoid exposure to liquid splashes, mists or dusts.

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.

Environmental exposure

controls

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

Liquid. Physical state Colorless Color Odorless Odor 6 pН

100°C (212°F) Boiling/condensation point 0°C (32°F) Melting/freezing point 0% (v/v) Volatility

0 % (w/w) [ISO 11890-1] VOC

Easily soluble in the following materials: cold water and hot water. Solubility

Section 10. Stability and reactivity

The product is stable. Stability Conditions to avoid No specific data.

Hazardous decomposition

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

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur. Conditions of reactivity

Not considered to be a product presenting a risk of explosion.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name Result **Species** Dose Exposure

Not available.

Conclusion/Summary Not available.

Product/ingredient name **ACGIH** IARC EPA NIOSH NTP **OSHA**

Not available.

Synergistic products Not available.

Section 12. Ecological information

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

Partition coefficient: noctanol/water

Not available.

Bioconcentration factor Not available.

Other adverse effects No known significant effects or critical hazards.



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Section 13. Disposal considerations

Waste disposal The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil,

waterways, drains and sewers.

RCRA classification Not available.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

International transport regulations

Not classified

Section 15. Regulatory information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Not controlled under WHMIS (Canada).

Canadian lists CEPA Toxic substances: None of the components are listed.

Canadian ARET: None of the components are listed. **Canadian NPRI**: None of the components are listed.

Alberta Designated Substances: None of the components are listed. Ontario Designated Substances: None of the components are listed. Quebec Designated Substances: None of the components are listed.

Canada inventory All components are listed or exempted.

International regulations

International lists Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted.

Korea inventory: All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): Not determined.

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

Section 16. Other information

The customer is responsible for determining the PPE code for this material.

Indicates information that has changed from previously issued version.

<u>History</u>

Date of printing17 May 2011Date of previous issue12 May 2011

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Notice to reader



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Version 3

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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