Material Safety Data Sheet

United States English

Section 1. Chemical product and company identification

Product name Load buffer type 1; part of 'illustra™ tissue & cells

genomicPrep Midi Flow Kit, 5 purifications'

Catalogue Number 28-9042-72

Component Number 406181

Material uses Industrial applications: Analytical reagent. Research.

Product typeLiquid.Validation date1 July 2011Print date01 July 2011

Supplier GE Healthcare UK Ltd

Amersham Place Little Chalfont

Buckinghamshire HP7 9NA

England

+44 0870 606 1921

<u>In case of emergency</u> US ChemTrec (US) 1-800-424-9300

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

2. Hazards identification

Physical stateLiquid.OdorOdorless

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview CAUTION!

MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE

TARGET ORGAN DAMAGE.

Potential acute health effects

EyesModerately irritating to eyes.SkinModerately irritating to the skin.

InhalationModerately irritating to the respiratory system.IngestionNo known significant effects or critical hazards.

Potential chronic health effects

Chronic effects
 Contains material that can cause target organ damage.
 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.

Target organs Contains material which causes damage to the following organs: skin, stomach.

Contains material which may cause damage to the following organs: eyes.

Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing
Ingestion No specific data.

Skin Adverse symptoms may include the following:

irritation redness



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Adverse symptoms may include the following: Eves

> irritation watering redness

Medical conditions aggravated by over-exposure

Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be

aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

Name CAS number % by weight

Sodium chloride 7647-14-5

Section 4. First aid measures

In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation Eye contact

occurs

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

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. It may be dangerous to

the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Fire-fighting measures

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

Extinguishing media

Suitable Use an extinguishing agent suitable for the surrounding fire.

Not suitable None known

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No Special exposure hazards

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.

Section 6. Accidental release measures

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

areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when

ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform **Environmental precautions**

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. Approach release from upwind. Prevent entry into Methods for cleaning up

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 (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and

section 13 for waste disposal.

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or Small spill

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

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

prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can

be hazardous. Do not reuse container.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a Storage

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.



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Section 8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Recommended monitoring

procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures

and/or the necessity to use respiratory protective equipment.

Engineering measures Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process

enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne

contaminants below any recommended or statutory limits.

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and Hygiene measures

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

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk Respiratory

assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. 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.

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

Personal protective equipment for the body should be selected based on the task being performed and the

Skin

risks involved and should be approved by a specialist before handling this product.

Environmental exposure

controls

Hands

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

Physical state Liauid Color Colorless. Odorless Odor

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

Section 10. Stability and reactivity

Stability The product is stable. Under normal conditions of storage and use, hazardous polymerization will not

occur.

No specific data. Materials to avoid

Hazardous decomposition

Conditions of reactivity

products

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

Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible

materials, organic materials, metals, acids, alkalis and moisture.

Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible

materials, organic materials, metals, acids, alkalis and moisture.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name Result Species Dose Exposure

Not available.

Conclusion/Summary Not available

Sensitizer

Conclusion/Summary Not available

Section 12. Ecological information

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

Aquatic ecotoxicity

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

Not available.

Conclusion/Summary Not available

Biodegradability

Not available. Conclusion/Summary

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. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

HCS Classification

Irritating material Target organ effects

U.S. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Sodium chloride

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sodium chloride:

Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: ethylenediamine tetraacetic acid

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I

Substances

Clean Air Act Section 602 Class II

Substances

DEA List I Chemicals (Precursor

Chemicals)

DEA List II Chemicals (Essential

Chemicals)

State regulations

California Prop. 65

United States inventory (TSCA 8b) United States inventory (TSCA 8b): 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.

Korea inventory (KECI): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Japan inventory (ENCS): All components are listed or exempted.

Chemical Weapons Convention List Schedule I Chemicals

Chemical Weapons Convention List Schedule II Chemicals

Chemical Weapons Convention List Schedule III Chemicals



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Section 16. Other information

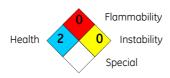
Label requirements

MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE

TARGET ORGAN DAMAGE.

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

National Fire Protection Association (U.S.A.)





Indicates information that has changed from previously issued version.

History

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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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