GE Healthcare

SAFETY DATA SHEET

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

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

1.1 Product identifier

Random Nonamer Primer; part of 'CyScribe™ Post-

Labeling Kit, $12 \times Cy^{TM}3 + 12 \times Cy^{TM}5'$

Catalogue Number RPN 5660

Component Number NIF1822

Product descriptionNot available.Product typeLiquid.Other means of identificationNot available.

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

Research and Development Analytical reagent. Analytical chemistry.

1.3 Details of the supplier of the safety data sheet

SupplierGE Healthcare UK LtdHours of operationAmersham Place08.30 - 17.00

Little Chalfont
Buckinghamshire HP7 9NA

England

+44 0870 606 1921

 $\textbf{Person who prepared the MSDS:} \quad msdslifesciences@ge.com$

1.4 Emergency telephone number

0870 606 1921

United Kingdom (UK) GE Healthcare UK Ltd

Amersham Place Little Chalfont Buckinghamshire HP7 9NA

National advisory body/Poison Centre

United Kingdom (UK) These services are only available to health professionals.

The UK National Poisons Emergency number is 0870 600 6266 (Outside the UK: +44 870 600 6266)

Guy's & St Thomas' Poisons Unit Medical Toxicology Unit Guy's & St Thomas' Hospital Trust

Avonley Road London SE14 5ER

Telephone: +44 (0)20 7771 5315 (Director), +44 (0)20 7771 5310 (Poisons information service)

Emergency telephone: 0870 243 2241

Fax: +44 (0)20 7771 5309 E-mail: npis@gstt.nhs.uk

Web site: http://www.medtox.org.uk

25800562-6

Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]



Article Number Page: 1/9

Validation date 18 May 2011

Version 1

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

Ingredients of unknown toxicity Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 100%

Ingredients of unknown ecotoxicity Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment:

100%

Classification according to Directive 1999/45/EC [DPD]

The product is not classified as dangerous according to Directive 67/548/EEC and its amendments.

Classification Not classified.

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

Hazard pictograms

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

PreventionNot applicable.ResponseNot applicable.StorageNot applicable.DisposalNot applicable.

Hazardous ingredients

Supplemental label elements Not applicable.

Special packaging requirements

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 Not available.

in classification

SECTION 3: Composition/information on ingredients

Substance/mixture Mixture

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

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 Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention

if symptoms occur.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical

attention if symptoms occur.



Article Number Page: 2/9

25800562-6 Validation date 18 May 2011

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for Ingestion

> breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical

attention if symptoms occur.

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

No known significant effects or critical hazards. 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

Over-exposure signs/symptoms

Eye contact No specific data. No specific data. Inhalation Skin contact No specific data. Ingestion No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

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

ingested or inhaled.

No specific treatment. Specific treatments

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

None known. Unsuitable extinguishing media

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or

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

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding For non-emergency personnel

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

material. Put on appropriate personal protective equipment.

For emergency responders If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on

suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform 6.2 Environmental precautions 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

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

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.



Article Number Page: 3/9

25800562-6 Validation date 18 May 2011 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 (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.

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

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

Advice on general occupational hygiene

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. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

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 Research and Development Analytical reagent. Analytical chemistry.

Industrial sector specific solutions Not available.

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

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. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

Appropriate engineering controls

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.

Individual protection measures

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.

Eye/face protection

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, gases or dusts.

Skin protection

Hand protection

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.

Body protection

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.

GE)

Article Number Page: 4/9

25800562-6

Validation date 18 May 2011

Version 1

Appropriate footwear and any additional skin protection measures should be selected based on the task Other skin protection

being performed and the risks involved and should be approved by a specialist before handling this

product.

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

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.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the **Environmental exposure controls**

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state Liquid. Colourless. Colour Odourless Not available. Odour threshold рΗ Not available. Not available. Melting point/freezing point Initial boiling point and boiling Not available

range

[Product does not sustain combustion.] Flash point

Not available **Evaporation rate**

Flammability (solid, gas) 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.

Burning time Not applicable. Not applicable. **Burning rate** Not available. Upper/lower flammability or

explosive limits

Not available. Vapour pressure Not available. Vapour density Not available. Relative density Solubility(ies) Not available. Partition coefficient: n-Not available.

octanol/water

Not available. Auto-ignition temperature **Decomposition temperature** Not available. Not available. Viscosity

Non-explosive in the presence of the following materials or conditions: open flames, sparks and static **Explosive properties**

discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible

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

Oxidising properties Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

No specific test data related to reactivity available for this product or its ingredients. 10.1 Reactivity

10.2 Chemical stability The product is stable.

10.3 Possibility of hazardous

reactions

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

10.4 Conditions to avoid No specific data. 10.5 Incompatible materials No specific data



Article Number Page: 5/9

25800562-6 Validation date 18 May 2011 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.

Acute toxicity estimates

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.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of Routes of entry anticipated:Oral, Dermal, Inhalation.

exposure

Potential acute health effects

InhalationNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.Eye contactNo known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

InhalationNo specific data.IngestionNo specific data.Skin contactNo specific data.Eye contactNo specific data.

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

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

Not available.



Article Number Page: 6/9

25800562-6 Validation date 18 May 2011

Conclusion/Summary Not available.

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Other information Not available.

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 (Koc Not available.

)

Mobility Not available.

12.5 Results of PBT and vPvB assessment

PBT Not applicable.

vPvB Not applicable.

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

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.

25800562-6

Packaging

Methods of disposal The generation of waste should be avoided or minimised wherever possible. Waste packaging should be

recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions 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.

SECTION 14: Transport information



Article Number Page: 7/9

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
14.6 Special precautions for user	Not available.	Not available.	Not available.	Not available.
Additional information	-	-	-	-

14.7 Transport in bulk according to Annex II of MARPOL

Not available.

73/78 and the IBC Code

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

Not determined. **Europe inventory**

Not listed **Black List Chemicals Priority List Chemicals** Not listed Integrated pollution prevention Not listed

and control list (IPPC) - Air

Integrated pollution prevention and control list (IPPC) - Water

Not listed

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



Article Number 25800562-6

Page: 8/9

15.2 Chemical Safety Assessment

Not available.

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.	

Full text of abbreviated H

statements

Not applicable.

Full text of classifications

[CLP/GHS]

Not applicable.

Not applicable. Full text of abbreviated R phrases

Full text of classifications

[DSD/DPD]

Not applicable.

18 May 2011 Date of printing Date of issue/ Date of revision 18 May 2011

Date of previous issue No previous validation

Version

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.



Article Number

25800562-6

Page: 9/9