GE Healthcare

SAFETY DATA SHEET

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

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

1.1 Product identifier

Product name CyScribe™ Reverse Transcriptase; part of

'CyScribe Post-Labeling Kit, 12 x Cy™3 + 12 x Cy5'

Catalogue Number RPN5660

Component Number NIF1841

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

1.3 Details of the supplier of the safety data sheet

GE Healthcare UK Ltd Supplier Hours of operation Amersham Place 08.30 - 17.00

Little Chalfont Buckinghamshire HP7 9NA

England

+44 0870 606 1921

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

1.4 Emergency telephone number

0848 8028 12

Switzerland GE Healthcare Bio-Sciences GmbH

Industriestr. 30 CH-8112 Otelfingen

National advisory body/Poison Centre

Switzerland Centre Suisse d'Information Toxicologique

(Swiss Toxicological Information Centre)

Freiestrasse 16 CH-8032 Zurich

Telephone: +41 44 251 66 66

Emergency telephone: +41 44 251 51 51 (145 from within Switzerland and Liechtenstein)

Fax: +41 44 252 88 33 E-mail: info@toxi.ch Web site: http://www.toxi.ch



Article Number 25800562-8

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.

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

			Classification		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
Glycerol		50-75	Xi; R36/37/38		

See Section 16 for the full text of the R-phrases declared above.

Occupational exposure limits, if available, are listed in Section 8.

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. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear

an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth

resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to

rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

Ingestion Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person

warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as

a collar, tie, belt or waistband.

Protection of first-aidersNo 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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact Irritating to eyes.

Inhalation Irritating to respiratory system.



Article Number

Page: 2/8

Validation date 18 May 2011



CyScribe™ Reverse Transcriptase; part of 'CyScribe Post-Labeling Kit, 12 x Cy™3 + 12 x Cy5'

Skin contact Irritating to skin.

Ingestion Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact Adverse symptoms may include the following:

irritation watering redness

Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact Adverse symptoms may include the following:

irritation redness

Ingestion No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician No specific treatment. 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

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

Decomposition products may include the following materials:

carbon oxides

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.

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

or 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. Approach the release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilt product. 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.



Article Number 25800562-8

Validation date 18 May 2011



Page: 3/8

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 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

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

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

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour 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.

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.

Other skin protection

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.

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



25800562-8

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical stateLiquid.ColourColourless.OdourOdourless.Odour thresholdNot available.pHNot available.

Melting point/freezing point Initial boiling point and boiling

range

Flash point

Evaporation rate Not available.

Flammability (solid, gas)

Burning time Burning rate

Upper/lower flammability or

explosive limits

Not available.

Vapour pressure

Vapour densityNot available.Relative densityNot available.

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

Partition coefficient: n-

octanol/water

Not available.

Auto-ignition temperature

Decomposition temperature

Viscosity

Explosive propertiesNon-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.

Oxidising properties 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. Under normal conditions of storage and use, hazardous polymerisation will not

occur.

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.



Article Number 25800562-8 Page: 5/8

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 Irritating to respiratory system.

Ingestion Irritating to mouth, throat and stomach.

Skin contactIrritating to skin.Eye contactIrritating to eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing

Ingestion No specific data.

Skin contact Adverse symptoms may include the following:

irritation redness

Eye contact Adverse symptoms may include the following:

irritation watering redness

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.

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.



Article Number 25800562-8

Validation date 18 May 2011

Page: 6/8

Other information

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary Not available.

12.2 Persistence and degradability

Conclusion/Summary Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Glycerol	-	>60%; 28 day(s).	Readily

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

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. 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 spilt material and

runoff and contact with soil, waterways, drains and sewers.

Hazardous waste

The classification of the product may meet the criteria for a hazardous waste.

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.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-		-	-
14.4 Packing group	-	Not available.	-	-
14.5 Environmental hazards				
14.6 Special precautions for user				



Article Number 25800562-8

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

CyScribe™ Reverse Transcriptase; part of 'CyScribe Post-Labeling Kit, 12 x Cy™3 + 12 x Cy5"

Additional information Not available.

> 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 Not applicable.

and articles

Other EU regulations

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

Aerosol dispensers National regulations

VOC content Liberated.

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.	

Full text of abbreviated H

statements

Not applicable.

Full text of classifications

[CLP/GHS]

Not applicable.

R36/37/38- Irritating to eyes, respiratory system and skin. Full text of abbreviated R phrases

Full text of classifications

[DSD/DPD]

Xi - Irritant

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

Date of previous issue No previous validation

Version 6

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

25800562-8

Page: 8/8 Validation date 18 May 2011

Version 6

RPN5660

