

Material Safety Data Sheet

Australia
English

1. Identification of the material and supplier

Product name **BIA normalizing solution 40%; part of 'PM Kit, type 4'**

Catalogue Number **BR-1004-29**

Company details**Manufacturer**

GE Healthcare UK Ltd
Amersham Place
Little Chalfont
Buckinghamshire HP7 9NA
England
+44 0870 606 1921

Supplier

GE Healthcare Bio-Sciences
Building 4B, Parklands Estate
21 South Street
Rydalmere NSW 2116
Australia
+61 2 8820 8299

Emergency telephone number **000 and +61 2 9846 4000**

ADG -

Uses

Area of application Industrial applications.
Material uses Analytical chemistry. Research.
Product type Liquid.

2. Hazards identification

Classification Not regulated.

Risk phrases Not classified.

Statement of hazardous/dangerous nature

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. Composition/information on ingredients

Mixture Yes.

Ingredient name

glycerol

CAS number

56-81-5

Concentration

40

Additional information

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no additional 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.

4. First-aid measures

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.

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

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



Article Number

14100429-1



Page: 1/5

Validation date 16 January 2015

Version 3

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

5. Fire-fighting measures

Extinguishing media

Suitable	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	None known.
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. In a fire or if heated, a pressure increase will occur and the container may burst.
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.
Hazardous combustion products	Decomposition products may include the following materials: carbon dioxide carbon monoxide

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 spilt material. Put on appropriate personal protective equipment (see Section 8).
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).
Methods for cleaning up	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.
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.

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.
Storage	Store between the following temperatures: 2 to 8°C (35.6 to 46.4°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.

8. Exposure controls/personal protection

Occupational exposure limits

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
glycerol	Safe Work Australia (Australia, 4/2013). TWA: 10 mg/m ³ 8 hours.
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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Engineering measures	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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.
<u>Personal protection</u>	
Eyes	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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Hands	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.
Respiratory	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.



Skin	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.

9. Physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	Odourless.
Flame duration	Not applicable.

10. Stability and reactivity

Chemical stability

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

11. Toxicological information

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.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
glycerol	LD50 Oral	Rat	12600 mg/kg	-

Conclusion/Summary Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary Not available.

Irritation/Corrosion

Conclusion/Summary Not available.

Sensitiser

Conclusion/Summary Not available.

Carcinogenicity

Conclusion/Summary Not available.

Mutagenicity

Conclusion/Summary Not available.

Teratogenicity

Conclusion/Summary Not available.

Reproductive toxicity

Conclusion/Summary Not available.

Chronic effects 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.

Over-exposure signs/symptoms

Inhalation No specific data.

Ingestion No specific data.

Skin No specific data.

Eyes No specific data.

Target organs Contains material which may cause damage to the following organs: kidneys, upper respiratory tract, skin, eyes.



12. Ecological information

Ecotoxicity No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
glycerol	Acute LC50 54 to 57 ml/L Fresh water		Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary Not available.

Persistence/degradability

Conclusion/Summary Not available.

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

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
glycerol	-1.76	-	low

Other adverse effects No known significant effects or critical hazards.

13. Disposal considerations

Methods of disposal The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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.

14. Transport information

Regulation	UN number	Proper shipping name	Class	PG	Label	Additional information
ADG	Not regulated.	-	-	-	-	-
ADR	Not regulated.	-	-	-	-	-
IMDG	Not regulated.	-	-	-	-	-
IATA	Not regulated.	-	-	-	-	-

PG* : Packing group

15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Ingredient name	Schedule
Not available.	

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

EU Classification Not classified.

HCS Classification Target organ effects

16. Other information

History

Date of printing	Date of previous issue
15 February 2015	22 June 2011
Date of issue	Version
16 January 2015	3



Indicates information that has changed from previously issued version.

Enquiries regarding MSDS content should be directed to: our local sales office.

Notice to reader



Article Number

14100429-1



9 5 1 4 1 0 0 4 2 9 1

Page: 4/5

Validation date 16 January 2015

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.



Article Number

14100429-1



9 5 1 4 1 0 0 4 2 9 1

Page: 5/5

Validation date 16 January 2015

Version 3