

Safety Data Sheet

Australia

Section 1. Identification

Product name **Rediprime™ II; part of 'Rediprime II, 60 reactions'**

Catalogue Number **RPN1634**



Component Number **NIF1607**

Product type ☒ Solid.

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

Identified uses

☒ Use in laboratories

Company details

Manufacturer

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

Supplier

GE Healthcare Australia
Level 11, 32 Phillip Street
Parramatta NSW 2150
Australia
1800 150 522

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

Section 2. Hazard(s) identification

Classification of the substance or mixture ☒ SKIN CORROSION/IRRITATION - Category 2

☒ Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 4%

☒ Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 4%

GHS label elements

Hazard pictograms



Signal word

☒ **WARNING**

Hazard statements

☒ Causes skin irritation.

Precautionary statements

Prevention

☒ Wear protective gloves. Wash hands thoroughly after handling.

Response

☒ IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention.

Storage

☒ Not applicable.

Disposal

☒ Not applicable.

Supplemental label elements

☒ Not applicable.

Other hazards which do not result in classification ☒ None known.



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Section 3. Composition and ingredient information

| | |
|-------------------------------|---|
| Substance/mixture | <input checked="" type="checkbox"/> Mixture |
| Other means of identification | Not available. |

CAS number/other identifiers

| | |
|--------------|-----------------|
| CAS number | Not applicable. |
| EC number | Mixture. |
| Product code | RPN1634 |

| Ingredient name | % (w/w) | CAS number |
|--|---------|------------|
| <input checked="" type="checkbox"/> -mercaptoethanol | 1 | 60-24-2 |

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.

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

Section 4. First aid measures

Description of necessary first aid measures

| | |
|--------------|---|
| Eye contact | <input checked="" type="checkbox"/> 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 | <input checked="" type="checkbox"/> Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Skin contact | <input checked="" type="checkbox"/> 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 | <input checked="" type="checkbox"/> Wash out mouth with water. Remove dentures if any. 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. 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. |

Most important symptoms/effects, acute and delayed

Potential acute health effects

| | |
|--------------|---|
| Eye contact | <input checked="" type="checkbox"/> No known significant effects or critical hazards. |
| Inhalation | <input checked="" type="checkbox"/> No known significant effects or critical hazards. |
| Skin contact | <input checked="" type="checkbox"/> Causes skin irritation. |
| Ingestion | <input checked="" type="checkbox"/> No known significant effects or critical hazards. |

Over-exposure signs/symptoms

| | |
|--------------|--|
| Eye contact | <input checked="" type="checkbox"/> Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | <input checked="" type="checkbox"/> No specific data. |
| Skin contact | <input checked="" type="checkbox"/> Adverse symptoms may include the following: irritation redness |
| Ingestion | <input checked="" type="checkbox"/> No specific data. |

Indication of immediate medical attention and special treatment needed, if necessary

| | |
|----------------------------|--|
| Notes to physician | <input checked="" type="checkbox"/> In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Specific treatments | <input checked="" type="checkbox"/> No specific treatment. |
| Protection of first-aiders | <input checked="" type="checkbox"/> 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. |



See toxicological information (Section 11)**Section 5. Firefighting measures****Extinguishing media**

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

Unsuitable extinguishing media ☒ None known.

Specific hazards arising from the chemical ☒ No specific fire or explosion hazard.

Hazardous thermal decomposition products ☒ Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides

Special protective actions 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**Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel ☒ 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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".

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 and material for containment and cleaning up

Small spill ☒ Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill ☒ Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage**Precautions for safe handling**

Protective measures ☒ Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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.

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.

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.



Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.

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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state Solid. [Pellets.]

Colour Blue.

Flammability (solid, gas) Not available.

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

Partition coefficient: n-octanol/water Not available.

Decomposition temperature Not available.

Flame duration Not applicable.

Section 10. Stability and reactivity

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

Chemical stability The product is stable.

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

Conditions to avoid No specific data.

Incompatible materials No specific data.

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



Section 11. Toxicological information

Information on toxicological effects**Acute toxicity**

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------|---------|-----------|----------|
| 2-mercaptoethanol | LD50 Oral | Rat | 244 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|------------------------|---------|-------|--------------|-------------|
| 2-mercaptoethanol | Eyes - Severe irritant | Rabbit | - | 2 milligrams | - |

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

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

Potential acute health effects

| | |
|--------------|---|
| Eye contact | <input checked="" type="checkbox"/> No known significant effects or critical hazards. |
| Inhalation | <input checked="" type="checkbox"/> No known significant effects or critical hazards. |
| Skin contact | <input checked="" type="checkbox"/> Causes skin irritation. |
| Ingestion | <input checked="" type="checkbox"/> No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|--------------|--|
| Eye contact | <input checked="" type="checkbox"/> Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | <input checked="" type="checkbox"/> No specific data. |
| Skin contact | <input checked="" type="checkbox"/> Adverse symptoms may include the following: irritation redness |
| Ingestion | <input checked="" type="checkbox"/> No specific data. |

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Short term exposure**

| | |
|-----------------------------|--|
| Potential immediate effects | <input checked="" type="checkbox"/> Not available. |
| Potential delayed effects | <input checked="" type="checkbox"/> Not available. |

Long term exposure

| | |
|-----------------------------|--|
| Potential immediate effects | <input checked="" type="checkbox"/> Not available. |
| Potential delayed effects | <input checked="" type="checkbox"/> Not available. |

Potential chronic health effects

Not available.

| | |
|-----------------------|---|
| General | 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. |

Numerical measures of toxicity

| Acute toxicity estimates | |
|--------------------------|-------------|
| Route | ATE value |
| Oral | 50000 mg/kg |
| Dermal | 30000 mg/kg |

Section 12. Ecological information

| Toxicity | | | |
|--|---|------------|------------------|
| Not available. | | | |
| Persistence and degradability | | | |
| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
| 2-mercaptoethanol | - | - | Not readily |
| Bioaccumulative potential | | | |
| Product/ingredient name | LogP _{ow} | BCF | Potential |
| 2-mercaptoethanol | -0.056 | <100 | low |
| Mobility in soil | | | |
| Soil/water partition coefficient (K _{oc}) Not available. | | | |
| Other adverse effects | No known significant effects or critical hazards. | | |

Section 13. Disposal considerations

| | |
|------------------|--|
| Disposal methods | 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

| Regulation | UN number | Proper shipping name | Class | PG | Label | Additional information |
|--|----------------|----------------------|--|----|-------|------------------------|
| ADG | Not regulated. | - | | - | | - |
| ADR | Not regulated. | - | | - | | - |
| IMDG | Not regulated. | - | | - | | - |
| IATA | Not regulated. | - | | - | | - |
| Special precautions for user | | | Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. | | | |
| Transport in bulk according to Annex II of Marpol and the IBC Code | | | Not available. | | | |




Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

 Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

Australia inventory (AICS)  Not determined.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)






Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

| | |
|-------------------------|--|
| Europe |  All components are listed or exempted. |
| United States |  Not determined. |
| Canada inventory |  All components are listed or exempted. |
| China |  Not determined. |
| Japan |  Not determined. |
| Malaysia |  Not determined. |
| New Zealand |  Not determined. |


Section 16. Any other relevant information

History

| | | | |
|-------------------------|-----------------|-------------------------------|-------------------|
| Date of printing | 19 October 2017 | Date of previous issue | 16 September 2009 |
| Date of issue | 19 October 2017 | Version | 6 |
| msdslifesciences@ge.com | | | |

Procedure used to derive the classification

| Classification | Justification |
|--|--------------------|
|  SKIN CORROSION/IRRITATION - Category 2 | Calculation method |

 Indicates information that has changed from previously issued 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.

