

# **Safety Data Sheet**

Australia

Section 1. Identification

Product name Regeneration Stock 2; part of 'Biotin CAPture

Kit'

Catalogue Number 28920233

9 0 2 8 9 2 0 2 3 3

Product type Liquid.

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

Identified uses

Analytical chemistry. Laboratory chemicals

Scientific research and development

Company details

+44 1494 508000

Manufacturer Supplier

Cytiva Global Life Sciences Solutions Australia Pty Ltd Amersham Place 495 Blackburn Road

Little Chalfont Mount Waverley VIC 3149
Buckinghamshire Australia

HP7 9NA United Kingdom tfn: 1800 150 522

Emergency telephone number 000 and +61 2 9846 4000

Section 2. Hazard(s) identification

Classification of the substance KIN CORROSION/IRRITATION - Category 1A

or mixture SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

**GHS label elements** 

**Hazard pictograms** 



Signal word DANGER

Hazard statements Causes severe skin burns and eye damage.

**Precautionary statements** 

**Prevention** Wear protective gloves, protective clothing and eye or face protection.

Response F INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a

POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice or attention.

Storage Not applicable.

Disposal Dispose of contents and container in accordance with all local, regional, national and international

regulations

Supplemental label elements Not applicable

Other hazards which do not

None known.

result in classification

Section 3. Composition and ingredient information

Substance/mixture Mixture

Other means of identification Not available.

Ingredient name% (w/w)IdentifiersSodium hydroxide4CAS: 1310-73-2<br/>EC: 215-185-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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

# Section 4. First aid measures

# **Description of necessary first aid measures**

Eye contact Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a

physician

Inhalation Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air

and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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 Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with

soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes

thoroughly before reuse.

**Ingestion** Get medical attention immediately. Call a poison center or physician. Wash out mouth with water.

Remove dentures if any. 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. Chemical burns must be treated promptly by a physician. 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** Causes serious eye irritation.

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

**Skin contact** Causes severe burns.

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

### Over-exposure signs/symptoms

**Eye contact** Adverse symptoms may include the following:

pain watering redness

Inhalation No specific data.

**Skin contact** Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

**Ingestion** Adverse symptoms may include the following:

stomach pains

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

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

been ingested or inhaled.

Specific treatments

No specific treatment

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

#### 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

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

Hazardous thermal decomposition products Decomposition products may include the following materials:

metal oxide/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. Do not breathe vapour or mist. 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

Stop leak if without risk. Move containers from spill area. Absorb with an inert 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. 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.

# Section 7. Handling and storage

# Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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

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 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 wellventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Article Number 28920233-3

# Section 8. Exposure controls and personal protection

## **Control parameters**

### Occupational exposure limits

Ingredient name Exposure limits

Sodium hydroxide Safe Work Australia (Australia, 1/2024)

PEAK: 2 mg/m<sup>3</sup>.

#### **Biological exposure indices**

No exposure indices known.

Appropriate engineering

controls

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.

**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 and/or face shield. If inhalation hazards exist, a full-face

respirator may be required instead.

Skin protection

Other 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.

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 and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### **Appearance**

Physical state Liquid.
Colour Colourless.
Odour Odourless.
Odour threshold Not available.
PH Not available.
Melting point/freezing point Not available.
Boiling point or initial boiling Not available.

point and boiling range

Flash point Not applicable.

Burning time Not applicable.

Burning rate Not applicable.

Evaporation rate Not available.

Lower and upper explosive

(flammable) limits

Flammability

Not available. Not available.

Ingredient name

Vapour pressure Not available.

Vapour Pressure at 20°C Vapour pressure at 50°C mm Hg kPa Method mm Hg kPa Method

Water 17.5 2.3 sodium hydroxide 0 0

Article Number 28920233-3

Page: 4/9

Relative vapour density Relative density

Solubility(ies)

Not available. Not available.

hot water

Media Result cold water Easily soluble

Solubility in water Partition coefficient: n-octanol/

Not available. Not applicable.

Auto-ignition temperature Not applicable. **Decomposition temperature** Not available. SADT Not available.

Viscosity

water

Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.

Flow time (ISO 2431)

Not available.

**Particle characteristics** 

Median particle size 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.

Easily soluble

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** 

Not available.

Conclusion/Summary

[Product]

Not available.

Skin corrosion/irritation

Product/ingredient name

sodium hydroxide

Result

Human - Skin - Severe irritant

Duration of treatment/exposure: 24 hours Amount/concentration applied: 10 pph

Conclusion/Summary

[Product]

Not available.

Serious eye damage/eye irritation

Not available.

Conclusion/Summary

[Product]

Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary

Not available.

[Product]

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary

[Product]

Not available.

Article Number 28920233-3

Respiratory

Conclusion/Summary

[Product]

Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary

[Product]

Not available.

Carcinogenicity

Not available.

Conclusion/Summary

[Product]

Not available.

Reproductive toxicity

Not available.

Conclusion/Summary

[Product]

Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name Result

Sodium hydroxide SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

(Respiratory tract irritation) - Category 3

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, Eyes.

Potential acute health effects

**Eye contact** Causes serious eye irritation.

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

**Skin contact** Causes severe burns.

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

Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** Adverse symptoms may include the following:

pain watering redness

Inhalation No specific data.

**Skin contact** Adverse symptoms may include the following:

pain or irritation redness

blistering may occur

**Ingestion** Adverse symptoms may include the following:

stomach pains

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

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Article Number 28920233-3

Page: 6/9

Potential immediate effects

Not available

Potential delayed effects

Not available.

Potential chronic health effects

Not available.

Conclusion/Summary

[Product]

Not available.

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.Reproductive toxicityNo known significant effects or critical hazards.

### **Numerical measures of toxicity**

### **Acute toxicity estimates**

N/A

# Section 12. Ecological information

**Toxicity** 

Product/ingredient name

sodium hydroxide

Result

Acute - LC50 - Fresh water

Fish - Western mosquitofish - Gambusia affinis - Adult

125 ppm [96 hours] Effect: Mortality

Conclusion/Summary[Product] Not available.

# Persistence and degradability

Not available.

Conclusion/Summary[Product] Not available.

# **Bioaccumulative potential**

Not available.

# **Mobility in soil**

Soil/water partition coefficient Not available.

Other adverse effects No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** 

PG

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

**ADG** ADR/RID **IMDG** IATA **UN** number UN1824 UN1824 UN1824 UN1824 **Proper shipping** SODIUM HYDROXIDE, SODIUM HYDROXIDE, SODIUM HYDROXIDE, SODIUM HYDROXIDE, SOLUTION SOLUTION SOLUTION SOLUTION name Class Label

Article Number 28920233-3



Environmental No. No. No. No. No.

hazards

Additional - - - -

information

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

**IMO** instruments

Not available.

# Section 15. Regulatory information

### Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

# Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

### **International regulations**

### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed

### **Montreal Protocol**

Not listed

### **Stockholm Convention on Persistent Organic Pollutants**

Not listed

# Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### Inventory list

Australia

United States

Canada inventory

China

All components are listed or exempted.

All components are listed or exempted.

All components are listed or exempted.

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

Japan inventory (ISHL): Not determined.

New Zealand All components are listed or exempted.

# Section 16. Any other relevant information

### <u>History</u>

**Date of printing** 09 September 2025 **Date of previous issue** 19 April 2022

**Date of issue** 09 September 2025 **Version** 6

sds\_author@cytiva.com

ADG = Australian Dangerous Goods

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by

the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

SUSMP = Standard Uniform Schedule of Medicine and Poisons

UN = United Nations

### Procedure used to derive the classification

Classification Justification

KIN CORROSION/IRRITATION - Category 1A

Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

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.