

SAFETY DATA SHEET

New Zealand

Section 1. Identification

Other means of identification

Product name

Sodium Bicarbonate (NaHCO3), 220 g

Catalogue Number SH30173.08

Not available.

Product type Powder.

Identified uses

Supplier

Cytiva Austria Kremplstr. 5 4061 Pasching AUSTRIA Tel. (+43) 7229 64865

Fax (+43) 7229 64866 Cytiva Singapore

1 Maritime Square #13-01 Harbourfront Centre Singapore 099253 HyClone Laboratories 925 West 1800 South Logan, Utah 84321 Phone: (435) 792-8000

Person who prepared the MSDS:

sds_author@cytiva.com

Cytiva New Zealand Buddle Findlay, Level 18, Pricewaterhousecooper Tower, 188 Quay Street, Auckland, Auckland, 1010 New Zealand

Emergency telephone number

111

Section 2. Hazards identification

HSNO Classification 6.1 - ACUTE TOXICITY (oral) - Category E

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

GHS label elements

Signal word Warning

Hazard statements May be harmful if swallowed.

Precautionary statements

Prevention Not applicable.

Response Call a POISON CENTER or doctor/physician if you feel unwell.

Storage Not applicable.

Disposal Not applicable.

Other hazards which do not

result in classification

May form explosible dust-air mixture if dispersed.

Article Number 29131185 Page: 1/8

Section 3. Composition/information on ingredients

Substance/mixtureSubstanceOther means of identificationNot available

CAS number/other identifiers

CAS number Not available.

EC number Not available.

Product code SH30173.08

Ingredient name%CAS numbersodium hydrogencarbonate100144-55-8

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

Inhalation 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.

Ingestion 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. Mentaling appropriately and proposition of the propositi

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. Get

medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before

reuse.

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 if irritation occurs.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation Exposure to airborne concentrations above statutory or recommended exposure limits may cause

irritation of the nose, throat and lungs.

Ingestion May be harmful if swallowed.

Skin contact No known significant effects or critical hazards.

Eye contact Exposure to airborne concentrations above statutory or recommended exposure limits may cause

irritation of the eyes.

Over-exposure signs/symptoms

Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing

IngestionNo specific data.SkinNo specific data.

Eyes Adverse symptoms may include the following:

irritation redness

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

Specific treatments Not available.

Notes to physician No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if

large quantities have been ingested or inhaled.

Protection of first-aiders 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)

Article Number 29131185 Page: 2/8

Section 5. Firefighting measures

Extinguishing media

Suitable Use dry chemical powder. Not suitable Do not use water jet.

chemical

Specific hazards arising from the May form explosible dust-air mixture if dispersed.

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

carbon dioxide carbon monoxide metal oxide/oxides Not available.

Hazchem code

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 and material for containment and cleaning up

Small spill

Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Use spark-proof tools and explosion-proof equipment. 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. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion-proof equipment. 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

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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage. including any incompatibilities Store between the following temperatures: 15 to 30°C (59 to 86°F). Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

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. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Article Number 29131185 Page: 3/8 **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.

Respiratory protection

Use a properly fitted, particulate filter 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

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.

Eye 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: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin 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.

Section 9. Physical and chemical properties

Appearance

Physical state Solid. [Crystalline powder.]

Colour White.

Odour Not available. **Odour threshold** Not available. Not available. **Melting point** Not available. Not available. **Boiling point** Flash point Not available **Burning rate** Not available **Burning time** Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not available. Lower and upper explosive Not available.

(flammable) limits

Vapour pressure Not available. Vapour density Not available Not available. Relative density Not available Solubility Solubility in water Not available Partition coefficient: n-octanol/ Not available.

Auto-ignition temperature Not available. **Decomposition temperature** Not available. SADT Not available. Viscosity Not available. Flow time (ISO 2431) Not available.

Aerosol product

Type of aerosol Not applicable. Heat of combustion Not available. Ignition distance Not applicable. **Enclosed space ignition - Time** Not applicable. equivalent

Article Number 29131185

Enclosed space ignition -

Deflagration density

Not applicable.

Flame height Not applicable.
Flame duration Not applicable.

Section 10. Stability and reactivity

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 Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).

Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate

static electricity during transfer by earthing and bonding containers and equipment before

transferring material. Prevent dust accumulation.

Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition

Incompatible materials

products

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

produced.

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation Exposure to airborne concentrations above statutory or recommended exposure limits may cause

irritation of the nose, throat and lungs.

Ingestion May be harmful if swallowed.

Skin contactNo known significant effects or critical hazards.

Exposure to airborne concentrations above statutory or recommended exposure limits may cause

irritation of the eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing

IngestionNo specific data.Skin contactNo specific data.

Eye contact Adverse symptoms may include the following:

irritation redness

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

Acute toxicity

Product/ingredient nameResultSpeciesDoseExposuresodium hydrogencarbonateLD50 OralRat4220 mg/kg-

Irritation/Corrosion

Not available.

Sensitisation

Not available.

Potential chronic health effects

General No known significant effects or critical hazards.

Inhalation Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

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. 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.

Chronic toxicity

Not available.

Article Number 29131185 Page: 5/8

Carcinogenicity

Not available.

Mutagenicity

Not available.

Teratogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity

Not available.

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

RouteOral

ATE value
4220 mg/kg

Section 12. Ecological information

Ecotoxicity No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
sodium hydrogencarbonate	Acute EC50 650000 μg/l Fresh water Acute LC50 767.87 mg/l Marine water	Algae - Navicula seminulum Crustaceans - Americamysis bahia	96 hours 48 hours
	Acute LC50 7550 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
	Chronic NOFC 576 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	3 weeks

Persistence/degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc) 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	inform	nation
OCCUOI	17.	Hansbort	11110111	ιαιιστ

Regulatory information	UN number	Proper shipping name	Classes	PG*
New Zealand Class	Not available.	Not available.	Not available.	-
		No.		
IATA Class	Not available.	Not available.	Not available.	-
		-		

Article Number 29131185 Page: 6/8

No.

IMDG Class Not available. Not available. Not available. -

No.

PG*: Packing group

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

HSNO Approval Number Not available.
HSNO Group Standard Not available.

HSNO Classification 6.1 - ACUTE TOXICITY (oral) - Category E

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 Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

 New Zealand
 All components are listed or exempted.

 Australia
 All components are listed or exempted.

 Europe
 All components are listed or exempted.

 United States
 All components are listed or exempted.

 Canada inventory
 All components are listed or exempted.

 China
 All components are listed or exempted.

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

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

Malaysia Not determined

Section 16. Other information

History

Date of printing15 April 2020Date of issue/ Date of revision24 May 2019Date of previous issue10/31/2018

Version 1

Key to abbreviations 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)

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

UN = United Nations

References Not available.

Indicates information that has changed from previously issued version.

Notice to reader

Article Number 29131185 Page: 7/8

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 ovict

Article Number 29131185 Page: 8/8