Date of issue: 11/12/2017
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Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:
- Product name: pH10.02 standard solution
- SDS No. : C0005E-2

Details of the supplier of the safety data sheet
- Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.
- Address: 3-1, Honmachibashi, Chuo-ku,Osaka ,JAPAN
- Division: Safety Management Dept. of Chemicals
- Telephone number: +81-6-6946-8061
- FAX: +81-6-6946-1607
- e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture
- (Note) GHS classification without description: Not classified/Classification not possible

Label elements
- No GHS label element
- No Signal word

3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

Ingredient name:Sodium hydrogen carbonate
- Content (%):0.21
- Chemical formula:NaHCO3
- Chemicals No, Japan:1-164
- CAS No.:144-55-8
- MW:84.01
- ECNO:205-633-8

Ingredient name:Sodium carbonate
- Content (%):0.27
- Chemical formula:CNa2O3
- Chemicals No, Japan:1-164
- CAS No.:497-19-8
- MW:105.99
- ECNO:207-838-8

Ingredient name:Water
- Content (%):99
- Chemical formula:H2O
- CAS No.:7732-18-5
- MW:18.02
- ECNO:231-791-2

Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

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

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

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/attention.

IF SWALLOWED

Rinse mouth.

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

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media data is not available.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Wear protective gloves, protective clothing or face protection.

When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity"

Storage

Conditions for safe storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

Container and packaging materials for safe handling

Glass

Polyethylene

8. Exposure controls/personal protection

Control parameters

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless, Clear

Odor: None

pH: 10.02 (25℃)

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Melting point/Freezing point data is not available.

Decomposition temperature data is not available.

Flammability (gases, liquids and solids) data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Lower and upper explosion limit/flammability limit data is not available.
Vapor pressure data is not available.
Relative vapor density (Air=1) data is not available.
Density and/or relative density: 1.00g/cm3
Kinematic viscosity data is not available.
Solubility:
Solubility in water: Soluble
n-Octanol/water partition coefficient data is not available.
No Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity
Not available.
Chemical stability
Stable under normal storage/handling conditions.
Possibility of hazardous reactions
(Sodium hydrogen carbonate)
The solution in water is a weak base. Reacts with acids. (ICSC 1044)
(Sodium carbonate)
The solution in water is a medium strong base. Reacts violently with acids. Reacts with magnesium and phosphorus pentoxide. This generates explosion hazard. Reacts with fluorine. This generates fire hazard. (ICSC 1135)
Conditions to avoid
Contact with incompatible materials.
Contact with fire source.
Incompatible materials
Acids, Magnesium, Phosphorus pentoxide, Fluorine
Hazardous decomposition products
Carbon oxides, Sodium compounds

11. Toxicological Information

Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
[GHS Cat. Japan, base data]
(Sodium carbonate)
rat LD50=2800mg/kg (SIDS, 2008)
Acute toxicity (Inhalation)
[GHS Cat. Japan, base data]
(Sodium carbonate)
mist: rat LC50=1.2mg/L/4hr (SIDS, 2008)
Irritant properties
Skin corrosion/irritation data is not available.
Serious eye damage/irritation
[GHS Cat. Japan, base data]
(Sodium carbonate)
rabbit severe irreversible eyes damage (SIDS, Access on Jul. 2008)
Allergenic and sensitizing effects data is not available.
Mutagenic effects data is not available.
Carcinogenic effects data is not available.
Reproductive toxicity data is not available.
STOT

STOT-single exposure
[cat.3 (resp. irrit.)]
[GHS Cat. Japan, base data]
(Sodium carbonate)
respiratory tract irritation (SIDS, 2008)
[cat.3 (drow./dizz.)]
[GHS Cat. Japan, base data]
(Sodium carbonate)
narcosis (SIDS, 2008)
STOT-repeated exposure data is not available.
Aspiration hazard data is not available.

12. Ecological Information

Ecotoxicity
Aquatic toxicity
Aquatic acute toxicity component(s) data
[GHS Cat. Japan, base data]
(Sodium hydrogen carbonate)
Crustacea (Ceriodaphnia reticulata) EC50=1020mg/L/48hr (SIDS, 2004)
(Sodium carbonate)
Crustacea (Daphnia) EC50＝250mg/L/48hr (SIDS 2002)
Aquatic chronic toxicity component(s) data
[GHS Cat. Japan, base data]
(Sodium hydrogen carbonate)
Crustacea (Daphnia magna) NOEC >576mg/L/21days (SIDS, 2004)
Water solubility
(Sodium hydrogen carbonate)
8.7 g/100 ml (20℃) (ICSC, 2004)
(Sodium carbonate)
0.53 g/100 ml (PHYSPROP_DB 2008)
Persistence and degradability
Persistence and degradability data is not available.
Bioaccumulative potential
Bioaccumulative potential data is not available.
Mobility in soil
Mobility in soil data is not available.
Other adverse effects
Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging
Waste treatment methods
Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

Not applicable to UN No., UN CLASS
Not applicable to IMDG Code
Not applicable to IATA Dangerous Goods Regulations
Environmental hazards
MARPOL Annex III - Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no
Transport in bulk according to Annex II of MARPOL73/78 and IBC Code
Noxious Liquid ; Cat. Z
Sodium carbonate
Non Noxious Liquid ; Cat. OS
Sodium hydrogen carbonate; Water

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
US major regulations
Chemicals listed in TSCA Inventory
Sodium hydrogen carbonate; Sodium carbonate; Water
Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

The product is not applicable to GHS classifications.
Reference Book
Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN
IMDG Code, 2018 Edition (Incorporating Amendment 39-18)
IATA Dangerous Goods Regulations (60th Edition) 2019
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2019 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
Supplier's data/information
General Disclaimer
This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.
The GHS classification data given here is based on current Japan official data (NITE published in 2018).