



Samchun Chemicals
(Material Safety Data Sheet)
Buffer solution pH 4.00

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifier	Buffer solution pH 4.00
2. Recommended Use & Uses advised against	Uses for Laboratory and R&D only
3. Information of Supplier	SAMCHUN PURE CHEMICAL CO.,LTD ADDRESS; 117, Sandan-ro, 16beon-gil, Pyungtaek-Si, Gyeonggi-Do, Korea Emergency Phone; 82-31-668-0700/3 Department; Q/A, Security Control dep. Web site; http://www.samchun.com

Section 2 – HAZARDS and DANGER IDENTIFICATION

1. GHS Classification · Identification Non-described

2. Label and Mark including Precautionary Statement

◦Label elements Non-described

◦Signal word Non-described

◦Hazard · Danger statement Non-described

◦Precautionary statement

Precaution Non-described

Measures Non-described

Storage Non-described

Dispose Non-described

3. Other Hazard-Risk which are not included in the classification criteria

N/A

Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	Other Name	CAS No.	Content(%)
Water		7732-18-5	> 98
Potassium hydrogen phthalate	Potassium biphthalate	877-24-7	1 ~ 2
Others			0 ~ 0.1

Section 4 – FIRST AID MEASURES

1. Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15minutes, Immediate medical attention is required.
2. Skin Contact	Take off contaminated cloths and shoes immediately, wash with plenty Of water and soap for at least 15minutes.
3. Inhalation	Move to fresh air immediately, if breathing is difficult, induce artificial respiration and immediate medical treatment is required.
4. Ingestion	Do not induce vomiting and Call a physician immediately.
5. Immediate medical attention and Notes for physician	If ingestion, consider gastric irrigation and injection of activated carbon slurry.

Section 5 – FIRE-FIGHT MEASURES

1. Suitable extinguish media	Extinguish Particles powder, CO2, water spray, foam durable alcohol
2. Special hazards arising from the substance	Pyrolysis products; N/A
3. Special protective equipment and Precautions for fire-fighters	Move a container away from fire place, available not being dangerous Should wear self-contained breathing apparatus, necessary protective device and if impossible require to withdraw immediately Cool the container with water spray for long time, after extinguishing Authorized person only, Blockade dangerous area, No trespassing

Section 6 – ACCIDENTIAL RELEASE MEASURES

1. Personal precautions and Emergency procedures	Don't touch leakages and avoid inhale and skin contact, ventilate and use air respiratory in closed room, remove ignition source.
2. Environmental precautions	Minimize leak/spill, collect and keep leak/spill in container
3. Methods and material for containment and cleaning up	Soak up with inert absorbent material such as sand, clay or others

Section 7 – HANDING AND STORAGE

1. Precautions for safe Handling	Do not breathe vapors/dust, not get in eyes and skin contact All containers on earth connection.
2. Conditions for safe storage	Keep container tightly closed dry and cool store, well-ventilated Isolate from prohibitive mixture substance

Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

1. Occupational exposure limit, biological exposure limit	N/A
2. Appropriate Engineering controls	Check conditions of exposure criteria, operation local ventilation during work
3. Personal protective equipment	
◦ Respiratory protection	Should be licensed (“Safety” mark) to respiratory protection equipment Air filters type of breathing protector (high-efficiency of fine particles of filter). Wear organic gas mask, air-supplier respirator or air respirator depend on using density or in case of non-known density and acute risk of health or life.
◦ Eye-protection	Safety glasses with side-shield keep away from harmful liquids. Eyewash stations and safety showers are close to the workstation place.
◦ Hand protection	Wear appropriate chemical endurance protective gloves.
◦ Skin and body protection	Wear appropriate chemical endurance protective clothing.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

1. Physical state	Liquid	2. Color	Colorless
3. Odor	Odorless	4. threshold	N/A
5. pH	4.00	6. Melting/Freezing point	0
7. Boiling point/range(°C)	100	8. Flashing point(°C)	N/A
9. Vapor speed	N/A	10. Flammability(solid, gas)	N/A
11. Explosion limit(lower)	N/A	12. Explosion limit(upper)	N/A
13. Vapor pressure	N/A	14. Water Solubility	Solubility
15. Vapor Density	N/A	16. Gravity	N/A
17. n-octanol-water Partition coefficient	N/A	18. self ignition temp(°C)	N/A
19. Cracking temp(°C)	N/A	20. Viscosity	N/A
21. Molecular Weight	N/A		

Section 10 – STABILITY AND REACTIVITY

1. Chemical stability	Stable under room temp., and pressure
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2. Possibility of Hazardous Reactions	Not Polymerized
3. Conditions to Avoid	N/A
4. Incompatible Materials	N/A
5. Hazardous Decomposition Products	N/A

Section 11 – TOXICOLOGICAL INFORMATION

1. Information on the likely routes of exposure.

N/A

2. Health hazard information

◦Acute toxic	N/A
◦Skin corrosive / irritant	May cause skin irritation
◦Serious eye damage / irritation	May cause eye irritation
◦Respiratory sensitization	N/A
◦Skin sensitization	N/A
◦Germ cell Mutagenicity	N/A
◦Reproductive toxic	N/A
◦Carcinogenicity	N/A
◦Specific target organ toxicity (single exposure)	N/A
◦Specific target organ toxicity (repeated exposure)	N/A
◦Aspiration hazard	N/A

Section 12 – ECOLOGICAL INFORMATION

1.Acquatic and Terrestrial ecotoxicity	N/A
2.Persistence and degradability	N/A
3.Bioaccumulative potential	N/A
4.Mobility in soil	N/A
5.Other adverse effects	N/A

Section 13 – Disposable considerations

1.Waste methods	Dispose in accordance with local regulations.
2.Waste warning	Isolate waste away from prohibitive mixture substance.

Section 14 – TRANSPORT INFORMATION

1.UN No.	N/A
2.Proper shipping Name	N/A
3.Hazard class	N/A
4.Packing group	N/A
5.Marine pollutant	N/A
6.Particular safety Measures for transportation	N/A

Section 15 – REGULATORY INFORMATION

1.Occupation safety and health acts	Non-described
2. National law of management of Harmful chemical Substance	Non-described
3. National law of Safety management of hazardous material	Non-described
4.National law of management of Wastes	Non-described
5.Other domestic and foreign law	(EC) regulation: Non-described

Section 16 – OTHER INFORMATION

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| 1. Material source | ACROS MSDS(Belgium), Sigma-Aldrich MSDS(US), KOSHA MSDS, KCMA's Chemical substance data, NEMA's chemical substance data, Chemical goods Dictionary |
| 2. The 1 st edition | 2002.07.30 |
| 3. Revision | 2 |
| 4. The final revision | 2013.01.25 |
| . Other references | |

* N/A : No information or not possible to get related to the data

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