

Material Safety Data Sheet

Version No.: 1.0 (Rev. date : 2022-04-25)

PC Buffer

1. Product and company identification

Product Name : PC Buffer

Recommended Use : For Research Use Only

Supply Information

☐ Company : Bioneer☐ Address : 8-11 Munpyeongseo-ro, Daedeok-gu, Daejeon 306-220, Republic of Korea☐ Emergency telephone number : 82-42-930-8777

2. Hazards identification

A. Classification of the hazardous chemical

Flammable liquids : Category 3

Metallic corrosive substances : Class 1

Acute toxicity (skin): Class 4

Skin corrosion/irritation: Class 1

Extreme eye damage/eye irritation : Class 1

B. Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statements

H226 : Flammable liquid and vapor

H290 : May corrode metal

H312 : Harmful in contact with skin

H314 : Causes serious skin burn and eye irritation

H318 : Extreme irritation to eyes

C. Precautionary statements

– Prevention :

P210 : Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 : Keep container tightly closed.

P234 : Store only in original container

P240 : Ground/bond container and receiving equipment.

P241 : Use explosion-proof electrical/ventilating/lighting/equipment.

P242 : Use only non-sparking tools.

P243 : Take precautionary measures against static discharge.

P260 : Do not breathe dust/fumes/gas/mist/vapours/spray

P264 : Wash hands thoroughly after handling.

P280 : Wear Protective glove/protective clothing/eye protection/face protection

– Response :

P301+P330+P331 : IF SWALLOWED: Rinse mouth. Do not try to vomit.

P302+P352 : IF ON SKIN: Gently wash with plenty of soap and water.

P303+P361+P353 : IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 : Call a medical center or doctor/physician you feel unwell.

P362+P364 : Take off contaminated clothing and wash before reuse.

P363 : Wash contaminated clothing before reuse.

P370+P378 : In case of fire: Use alcohol-resistant foam, Dry powder extinguishing agent, Carbon Dioxide for extinction.

P390 : Absorb leaking water to prevent material damage

– Storage :

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P406 : Please store it in a corrosive container (as defined by the manufacturer or administrative office) as it is corrosive to metals

– Disposal :

P501 Dispose of contents/container to information seted forth in the relevant laws and regulations.

D. Other Risks/Hazards Not Included in Risk-Hazard Classification

Health 3 Fire 2 Reactivity 0

3. Composition/information on ingredients

Chemical name	Synonyms	CAS No.	Weight (%)
Potassium acetate		127-08-2	< 50%
Acetic acid		64-19-7	<10%

4. First aid measures

A. Eye contact

If in eyes, rinse carefully with water for a few minutes.

If possible, remove contact lenses.

Keep washing.

If eye irritation persists, seek medical attention and advice.

B. Skin Contact

Take immediate medical attention.

Remove contaminated clothing and shoes and isolate contaminated areas.

Flush skin and eyes with water for at least 20 minutes immediately upon contact with substance.

Wash clothes and shoes thoroughly before reuse.

C. Inhalation : If exposed to excess dust or fume, remove with clean air and take medical attention if cough or other symptoms occur.

D. Ingestion

Do not feed anything by mouth to an unconscious person. Take immediate medical attention.

E. Notes to Physician

If swallowed and feel uncomfortable, consult a medical institution (doctor).

Rinse mouth.

If you eat or inhale the substance, do not breathe in the oral cavity and use appropriate respiratory medical equipment.

5. Fire-fighting measures

A. Proper (improper) extinguishing Media

Use of alcohol, carbon dioxide or water spray in the digestion of this substance

Use dry sand or dirt during choking digestion

B. Special hazards from chemicals

Flammable liquid and vapor

May corrode metal

May cause fire and explosion from extreme polymerization

Vapor may cause ignition when near ignition source

Toxic gases may form during heat decomposition or combustion

May form explosive mixture near and above ignition point

Container may explode upon heating

Highly flammable: Easily ignited with heat, sparks or flames

Leaks may lead to fire/explosions

Vapor explosion hazard indoors, outdoors and in sewers

Portions may burn but will not ignite easily

May form explosive mixture when vapor is mixed with air

Some may generate flammable hydrogen gas in contact with metals

Non-volatile. The chemical itself does not burn but heating may disintegrate and form corrosive/toxic fumes.

C. Firefighting Protection and Precautions

Some may be transported at high temperatures

Leaking water can cause contamination

May cause skin and eye burns during contact

Let the ditch be dug up for the disposal of the extinguishing water and keep the material from scattering.

If you are not dangerous, move the container in the fire area

After the extinguishing of the tank fire, the container is cooled with plenty of water

If there is a high tone in the tank fire or if the tank is discolored, pull back immediately

When the tank fires, pull back from the tank in flames

6. Accidental release measures

A. Personal Precautions

Avoid inhalation of dust, fume, gas, mist, vapor and spray.

Immediately wipe off any spills and follow preventive measures in the protective section.

Remove all ignition sources

If you are not at risk, stop the leak.

Do not touch the damaged container or leaking water without wearing adequate protection.

Cover with plastic sheet and spread

Prevent dust formation

Be aware of the materials and conditions that should be avoided

B. Environmental precautions :

Avoid ingress into water, sewers, basements and confined spaces

Do not dispose to the environment

C. Methods and material for containment and cleaning up

For small leaks, absorb into sand, non-combustible material and soak in container

High volume leak liquid leak water away ditch

With a clean shovel, drain the leak into a clean, dry container, loosen and move the container out of the leak area.

Cover the plastic sheet with a powder leak to prevent diffusion and keep it dry.

Absorb the spills into an inert material (e.g. dry sand or soil) and put it in a chemical waste container.

Absorb liquids and flush contaminated areas with detergent and water.

7. Handling and storage

A. Handling precautions

Avoid inhalation of dust, fume, gas, mist, vapor and spray.

Wash the treated area thoroughly after handling.

Do not eat, drink or smoke when using this product.

Only handle outdoors or in well-ventilated places.

After the container has been emptied, the product residue may still remain, so follow all the MDS/label precautions.

Please use the handling/storage carefully.

Carefully open the forehead before opening.

Be aware of the materials and conditions that should be avoided

Work with reference to engineering management and personal protective equipment

Beware of high temperatures

B. Storage precautions

Drain the empty drum completely and prevent it from being properly put back on the drum regulator or place it properly.

Store container tightly sealed in a well-ventilated place.

Keep away from food and drinks.

8. Exposure controls / personal protection

A. Chemical Exposure Standards, Biological Exposure Standards Etc. : No data available

B. Proper physical management : In case of dust, fume or mist during operation, ventilate air pollution to be maintained below exposure criteria. Facilities for storing or using this material should be equipped with a washing machine and safety shower.

C. Personal protection

○ Respiratory protection

Wear a respirator that is certified by the Occupational Safety and Health agency to match the physical and chemical properties of the exposed material.

Wear an oxygen-deficient (< 19.6%), Pine-mask, or self-feeding respirator.

In the case of gas/liquid materials, the following respiratory protection is recommended—isolation type full-type mask (for organic compounds (acidic gas gas)) or isolated formula, whereas mold mask (for organic compounds (acid Gas Castle Gas)) or direct connection type full-type mask (for organic compounds (acidic gas if acid gas)) or, whereas the type gas mask (for organic compounds (acidic gas)) or motorized gas mask

○ Eyes protection : No data available.

○ Hands protection : No data available.

○ Body protection : No data available

9. Physical and chemical properties

- A. Appearance : Achromatic
 - B. Odor : No information
 - C. Odor threshold : No information
 - D. pH : No information
 - E. Freezing/Melting point : No information
 - F. Boiling point and Range : No information
 - G. Flash point : No information
 - H. Evaporation speed : No information
 - I. Flammability (Solid, Gas) : No information
 - J. Ignition or explosion range : No information
 - K. Vapor pressure : No information
 - L. Solubility : No information
 - M. Vapor density : No information
 - N. Specific weight : No information
 - O. n-Octanol/Water solubility coefficient : No information
 - P. Self-Flammability : No information
 - Q. Decomposition temperature : No information
 - R. Viscosity : No information
 - S. Molecular weight : No information
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10. Stability and Reactivity

- A. Chemical stability and toxic reaction potential
 - Stable under normal pressure conditions
 - May cause irritation or toxic fumes in the event of fire
 - Inhalation of substances may be harmful
 - Some liquids may cause dizziness and choking vapors
 - The container may explode when heated.
 - Some may be burned but do not ignite easily
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Non-flammable, the substance itself is not burned, but can be decomposed during heating to cause corrosive/toxic fume

May cause irritation, corrosive, toxic gas in the event of fire

B. Conditions to avoid

Heat, sparks, flames, etc. Ignition source

C. Conditions to avoid

Flammable materials, reducing materials, metals

D. Hazardous decomposition products

May cause irritating and very toxic gases by burning or pyrolysis during burning

Irritant, toxic gases

11. Toxicological information

A. Probable exposure paths

Irritation, nausea, vomiting skin irritation, skin disorders eye irritation

Short-term exposure causes irritation, chest pain and shortness of breath

Short-term or prolonged exposure causes irritation, allergic reactions

B. Health hazard information

☐ Acute toxicity : No information

☐ Skin corrosion/irritation : No information

☐ Serious eye damage/eye irritation : No information

☐ Respiratory or skin sensitization : No information

☐ Carcinogenicity : No information

☐ Germ cell mutagenicity: No information

☐ Reproductive toxicity : No information

☐ Specific target organ toxicity (single exposure) : No information

☐ Specific target organ toxicity (repeated exposure) : No information

☐ Aspiration hazard: No information

12. Ecological information

- A. Biological toxicity : No information
 - B. Persistency and Degradability : No information
 - C. Bioconcentration : No information
 - D. Soil mobility : No information
 - E. Other toxic effects : No information
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13. Disposal considerations

- A. Disposal method : Dispose of contents and containers in accordance with the regulations, as specified in the Waste Control Act.
 - B. Disposal considerations : Please take into account the precautions set forth in the Waste Control Act.
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14. Transport information

- A. UN No : 2789
 - B. UN proper shipping name : ACETIC ACID,SOLUTION
 - C. Transport hazard class : 8
 - D. Packaging group : II
 - E. Environmental hazards : No classification information
 - F. Special Safety Measures for Users Regarding Shipping or Shipping Measures : No classification information
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15. Regulatory information

- A. Industrial safety and health regulation : No information
 - B. Hazardous chemical management regulation : No information
 - C. Dangerous material management regulation : No information
 - D. Waste management regulation : No information
 - E. Other domestic and international regulations : No information
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16. Other information

A. Source of Information

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)

ECB-ESIS(European chemical Substances Information System)(<http://ecb.jrc.it/esis>)

ECOTOX Database, EPA(<http://cfpub.epa.gov/ecotox>)

IUCLID Chemical Data Sheet, EC-ECBInternational Chemical Safety Cards(ICSC)
(<http://www.nihs.go.jp/ICSC>)

TOXNET, U.S. National Library of Medicine(<http://toxnet.nlm.nih.gov>)

The Chemical Database, The Department of Chemistry at the University of Akron
(<http://ull.chemistry.uakron.edu/erd>)

B. Initial Issue Date : 2018-02-19

C. Revision Count and Latest Revision Date : 2022-04-25

D. Others

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