

## SAFETY DATA SHEET

### Pot Ash

Issue date: 3/12/2010

Revised date: 11/21/2014

## 1. IDENTIFICATION

Product Name: POTASSIUM CARBONATE - Solid (Granular & Powder)

1) Other Name: Dipotassium carbonate, Potash, Pearl ash

Recommended Use and Restriction on Use

1) General use: Kali Soap -Kali Glass -Optical Glass Materials  
 dyeing - tannage -Photos -Analytical reagents, ingredients for  
 pharmaceuticals, Chemicals used for operations

2) Restriction on Use: Not available

Supplier: PRO Chemical & Dye\

126 Shove Street  
 Fall River, MA 02724

Emergency Telephone Numbers:

800-255-3924 ChemTel. (United States)

+ 1 01 813-248-0585 (Outside the United States)

## 2. HAZARD IDENTIFICATION

### 1. GHS Classification

Physical Hazards	Health Hazards	Environmental Hazards
	Skin corrosion/irritation Cat. 2 Serious eye damage/irritation Cat. 2 Specific Target organ Toxicity(single exposure) Cat. 3	-

### 2. GHS label elements, including precautionary statements

1) Hazard symbols



2) Signal word: Warning

3) Hazard statement

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness

#### 4) Precautionary statement

Prevention	<ul style="list-style-type: none"> <li>- P264 Wash thoroughly after</li> <li>- P280 Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.</li> <li>- P271 Use only outdoors or in a well-ventilated area.</li> </ul>
Response	<ul style="list-style-type: none"> <li>- P312 Call a POISON CENTER or doctor/physician if you feel unwell.</li> <li>- P362 Take off contaminated clothing and wash before reuse.</li> <li>- P302+P352 IF ON SKIN: Wash with plenty of soap and water.</li> <li>- P332+P313 If skin irritation occurs: Get medical advice/attention.</li> <li>- P337+P313 If eye irritation persists: Get medical advice/attention.</li> <li>- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</li> <li>- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove lenses, if present and easy to do. Continue rinsing.</li> </ul>
Storage	<ul style="list-style-type: none"> <li>- P405 Store locked up.</li> <li>- P403+P233 Store in a well-ventilated place. Keep container tightly closed.</li> </ul>
Disposal	<ul style="list-style-type: none"> <li>- P501 Dispose of contents/container in accordance with local/regional/national/international regulation.</li> </ul>

#### 3. Other hazards which do not result in classification:

- NFPA Grade (0-4 level): Health-I, Flammability-O, Reactivity-O

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Other name	CAS Number	Contents()
POTASSIUM CARBONATE	-	584-08-7	99.5

Chemical Name	CAS NO	KE NO	UN NO	EN NO
POTASSIUM CARBONATE	584-08-7	TS7750000	-	209-529-3

### 4. FIRST-AID MEASURES

#### 1. Eye Contact:

- Immediately Lift eyelid and flush eyes with flowing water.
- Lift eyelid and completely remove materials. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids.
- Transport to hospital or doctor.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

## 2. Skin Contact :

- Remove contaminated clothing and shoes immediately.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

## 3. Inhalation :

- If inhalation of fume or combustion. Move to the fresh air.
- Go to where the fresh air and If you necessary. Conduct artificial respiration.
- If not breathing. Give artificial respiration.
- If breathing is difficult. Give oxygen.

## 4. Ingestion :

- Wash out mouth with water.
- If swallowed do NOT induce vomiting.
- Lay the patient down as head would be lower than body for suffocation prevention if occur vomiting.
- Get medical attention immediately.

## 5. Delayed and immediate effects and also chronic effects from short and long term exposure

- May cause eye, skin, respiratory irritation when exposed.
- May cause lung effect of Long-term exposure to dust of high concentrations.
- Ingestion may cause nausea, vomiting and stomach and severe digestive system irritation and burns.
- Inhalation may cause respiratory irritation.
- If contact with skin May cause irritation and Caustic effect is analogous to Potassium hydroxide.
- If contact with eye May cause irritation and Caustic effect is analogous to Potassium hydroxide.

## 6. First-aid treatment and note to physician:

- Treatment may vary with condition of victim and specifics of incident.

# 5. FIRE-FIGHTING MEASURES

## 1. Suitable (Unsuitable) extinguishing media:

- Extinguishing media: Dry chemical powder, CO<sub>2</sub>, Water, foam.
  - If large fire, use regular extinguishing media or flood with fine water spray
- Unsuitable extinguishing media: Do not use water-jet.

## 2. Specific hazards arising from the chemical:

- Non flammable.
- Substance itself does not Burn but Decompose when heated may cause corrosive/toxic fume.
- Fire risk can be ignored but Containers may rupture or explode if exposed.
- Hazardous combustion product:  
Thermal decomposition may produce gas or/and fume of carbon dioxide, carbon monoxide, potassium oxide.

## 3. Special protection actions and equipments for fire-fighting:

- Firefighters should wear self contained breathing apparatus and protective clothing.
- If safe to do so, remove containers from path of fire.
- If removal is impossible, cool containers and surrounding area with water.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not allow run-off from fire fighting to enter drains or water courses.
- Do not impervious water inside containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 1. Personal precautions

- Wear appropriate personal protective equipment and avoid inhalation or contact with eyes and skin.
- Wear appropriate personal protective equipment (see section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Keep unnecessary people away.
- Ventilate leak areas.
- Avoid dust formation.

Isolate of spilled material (Small spills: Adsorption of absorbent etc.)

- Possibly collect recoverable product (used for shovel or vacuum vehicle).
- Residue is neutralized for the acid.
- Move container to safe area from the leak area.
- Wear personal protect clothes, protective equipment.

### 2. Environmental precautions:

- Avoid dispersal of spilt material and runoff and contact with soil. Waterways, drains and sewers.
- If large spills. advise emergency services.

### 3. Methods and materials for containment and cleaning up

#### 1) Small spills

- Remove the spilled material. -. Use to dry removal method and Suppression occurrence of dust.

#### 2) Large spills

- For disposal of spilled material in appropriate containers collected.
- Wash spill area with plenty of water.

## 7. HANDLING AND STORAGE

### 1. Handling

- Wear appropriate personal protective equipment(see section 8. EXPOSURE CONTROLS /PERSONAL PROTECTION).
- Avoid contact with incompatible materials.
- Use in a well-ventilated area.
- Do not mixed storage and transportation of grocery, fodder, medicines, food.
- When handling, DO NOT eat, drink or smoke.
- Avoid breathing dust and contact with the eyes, skin.
- Wash hands with soap and water after handling.
- Minimize occurrence of dust and accumulation.

### 2. Storage Precautionary Statements

- Save and handle applicable laws and regulations.
- the original container should be stored.
- Store away from water or moisture and store in dry area(strong hygroscopic property).
- The container withstand for physical damage should be stored.
- Save in cool, dry and well ventilated place.

- Stored in airtight containers and avoid contact with water and moistures.
- Absorption is the cause of the reduction of the concentration with Potassium Carbonate.
- Do not store with Volatile Organic Compounds. Product may discolor.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 1. Exposure Limits

- Exposure limit under ISHL(KOREA) : Not applicable
- ACGIH limit: Not applicable
- Biological exposure limits: Not applicable

### 2. Engineering Controls

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces.

### 3. Personal Protective Equipment

#### 1) Respiratory Protection:

- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
- Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.
- Dust, mist, fume-purifying respiratory protection
- Any air-purifying respirator with a corpuscle filter of high efficiency
- Any respiratory protection with a electromotion fan (for dust, mist, fume-purifying)
- For Unknown Concentration or Immediately Dangerous to Life or Health
- Self-contained breathing apparatus (pressure-demand or other positive-pressure mode in combination)
- Supplied-air respirator with full face-piece

#### 2) Eye protection:

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

#### 3) Hand protection Wear appropriate protective gloves.

#### 4) Body protection Wear appropriate protective cloth.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

1. Appearance: Solid / Colorless or white
2. Odor: Odorless
3. Odor threshold: Not available
4. pH : 11.0 (0.02 M Solution)
5. Melting point / Freezing point: 1636° F (891°C) / Not available
6. Initial Boiling Point / Boiling Ranges: Decomposition / Not available
7. Flash point: Not available
8. Evaporation Rate: Not available
9. Flammability (solid, gas) : Not available
10. Upper/Lower Flammability or explosive limits Not available
11. Vapor pressure: Not available
12. Solubility : soluble(water)
13. Vapor density: Not available
14. Relative density : 2.428 (25°C) (Water = 1)
15. Partition coefficient of n-octanol/water : Not available

16. Autoignition Temp. : Not available (Not applicable)
17. Decomposition Temp. : Not available
18. Viscosity: : Not available
19. Molecular weight : 138.21

## 10. STABILITY AND REACTIVITY

### 1. Stability

- This material is stable under recommended storage at normal temperature and pressure.

### 2. Possibility of Hazardous Reaction

- Polymerization: Will not occur.

### 3. Conditions to Avoid

- Keep away from heat, flame, sparks and source of ignition.

### 4. Materials to Avoid

- Avoid contact with Oxidants (Acids, nitrates, chlorine bleach, the chlorine used in pools).
- Because the reaction with Aluminum, Fluoro, Magnesium, Silicon, Chlorine Tri t luor I de. Powder metal should be avoided.

### 5. Hazardous Decomposition Products:

- Carbon compounds, potassium and its compound.

## 11. TOXICOLOGICAL INFORMATION

### 1. Information of Exposure route:

- 1) (Respiratory tract): May cause respiratory irritation.
- 2) (Oral): Not Classified.
- 3) (Eye Skin): Causes serious eye irritation. Causes skin irritation.

### 2. Delayed and immediate effects and also chronic effects from short and long term exposure

#### 1) Acute Toxicity:

- Oral Toxicity: LD50> 2000mg/kg b.w.(Rat)
- Dermal Toxicity: Not available
- Inhalation Toxicity: Not available

#### 2) Skin corrosion/irritation:

- Irritation is observed.

#### 3) Serious eye damage/irritation - . Irritation is observed.

#### 4) Respiratory sensitization: Not available

#### 5) Skin sensitization:

- In the intracutaneous skin sensitisation test. allergic skin reactions is not observed.

#### 6) Carcinogenicity: Not applicable

#### 7) Germ cell mutagenicity:

- Ames test: Negative
- Gene mutation (mammalian eel I gene mutation assay) : Negative
- Chromosome aberration(mammalian chromosome aberration test) : Negative

- 8) Reproductive toxicity:
  - No adverse effects were observed in the reproductive study using the rats for high concentration.
- 9) Specific Target organ Toxicity(single exposure) :
  - May cause respiratory irritation.
- 10) Specific Target organ Toxicity (repeated exposure)
  - No adverse effects are observed in the repeated exposure study using the rodents.
- 11) Aspiration hazard: Not available

## 12. ECOLOGICAL INFORMATION

1. Ecotoxicity :
  - Acute aquatic toxicity
    - Fish : LC50=68mg/L. 96hr. *Oncorhynchus mykiss*
    - Daphnia magna: EC50=430mg/L. 48hr. *Daphnia magna*(non-GLP)
    - Algal : Not available
2. Persistence and degradability: Not available
3. Bioaccumulation: Not available
4. Mobility in soil: Not available
5. Other adverse effects: Not available

## 13. DISPOSAL CONSIDERATIONS

1. Disposal methods:
  - The user of this product must properly characterize the waste/container generated from the use of this product in accordance with all applicable federal, state and/or local laws and regulations in order to determine the proper disposal of the waste in accordance with all applicable federal, state and/or local laws and regulations.
2. Special precautions for disposal
  - The user of this product must dispose by oneself or entrust to waste disposer or person who other's waste recycle and dispose. person who establish and operate waste disposal facilities.
  - Dispose of waste in accordance with local regulation.

## 14. TRANSPORT INFORMATION

1. UN Number: Not regulated for transport of dangerous goods
- 2 UN Proper Shipping name: Not applicable
- 3 Transport hazard class(es) : Not applicable
- 4 Packing group: Not applicable
- 5 Sea pollutants: Not applicable
- 6 Special precautions for user related to transport or transportation measures
  - EmS FIRE SCHEDULE: Not applicable

- EMS SPILLAGE SCHEDULE: Not applicable
- 7. CANADIAN TRANSPORTATION OF DANGEROUS GOODS
  - Proper Shipping Name: Not regulated under TOG
  - TOG Classification: Not Applicable
  - UN Number (PIN) : Not Applicable
  - Packing Group: Not Applicable

## 15. REGULATORY INFORMATION

1. ISHL(The industrial Safety and Health Law in Korea) : Not applicable
2. The Toxic Chemical Control Act in Korea(TCCA in Korea) : Not applicable
3. Dangerous goods Safety Management Law in Korea: Not applicable
4. Waste Management Law in Korea: Not applicable
5. Other regulations
  - 1) POPs Management Law: Not applicable
  - 2) Information of EU Classification:
    - Classification: Not Classification
    - Symbol(s) and Indication(s) of Danger: Not applicable
    - Risk and Safety Phrases: Not applicable
  - 3) US REGULATIONS:
    - CERCLA section 103 (40 CFR 302.4) : Not regulated
    - SARA section 302 (40 CFR 355.30) : Not regulated
    - SARA section 304 (40 CFR 355.40) : Not regulated
    - SARA Hazard Categories. SARA section 311/312 (40 CFR 370.21)
      - ACUTE: YES
      - CHRONIC: NO
      - FIRE: NO
      - REACTIVE : NO
      - SUDDEN
      - RELEASE : NO
    - SARA section 313 (40 CFR 372.65) : Not regulated
    - OSHA regulation (29 CFR 1910.119) : Not regulated
    - US STATE REGULATIONS :
      - CALIFORNIA PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act)
      - : Not regulated
  - 4) Chemical inventory status:
    - US inventory (TSCA): listed.
    - TSCA 12(b) Export Notifications: Not listed.
  - 5) Others
    - Rotterdam Convention on Harmful Chemicals & Pesticides: Not applicable
    - Stockholm Convention on Persistent Organic Pollutants: Not applicable
    - Montreal Protocol on Substances That Deplete the Ozone Layer: Not applicable
  - 6) CANADIAN REGULATIONS
    - This product has been classified in accordance with the hazard criteria of the Control led Products Regulations and the SDS contains al l the information required by the Control led Products Regulations
  - 7) WHMIS - Classifications of Substances:
    - D2B - Poisonous and Infectious Material; Materials causing other toxic effects
    - Toxic Material
  - 8) WORKPLACE HAZARD: Severe eye irritant



## 16. OTHER INFORMATION

### 1. Reference

- 1) The Korea Occupational Safety and Health Agency; KOSHA MSDS
- 2) Korea regulations  
: Industrial Safety and Health Law. Waste Management Law. Toxic Chemical Control Act.  
ENFORCEMENT DECREE OF THE WATER QUALITY AND ECOSYSTEM  
CONSERVATION ACT.
2. Issue date: 2010. 03. 12
3. Revision number and Last date revised: 2014. 11. 21
4. Written Authority: UNID Co. Ltd. (<http://www.unid.co.kr> Tel. 032-830-7777)

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