

#### 1. Product and Company Identification

- A. Product name : Dibasic Sodium Phosphate (Dodeca Hydrate)
- B. Relevant identified uses of the substance or mixture and uses advised against
- Recommended Use : For increasing moisture holding capacity, water treatment, antiscales, emulsifier, dyeing assistant, stabilizer, tooth paste, medicine, pH buffer, detergent, shampoo, acidifier, raw material for bittern.
- Usage Limits : No data available
- C. Manufacture / Supplier/ Distributor information
- Company : Youngjin co. ltd.
- 🔿 Address : 38, Ojeong-ro, Ojeong-gu, Bucheon-si, Gyeonggi, Korea
- O Department : Quality Control Department
- Telephone : 82-32-674-4221

#### 2. Hazards Identification

- A. Hazards Identification Classification
- Hazard classification is not carried out according to Ministry of Employment and Labor Notice No. 2016-19
- B. Warning marks
- $\bigcirc$  Pictorial symbol : No data available
- Signal word: No data available.
- Hazardous expression : No data available.
- Precaution expression : No data available.
- Respond : No data available.
- Storage : No data available.
- $\bigcirc$  Disposal : No data available.
- C. NFPA Rating (0-4 level): Health=1, Fire=0, Reactivity=0

### 3. Composition, Information on Ingredients

| Chemical Name            | Idiomatic name            | Percent (%) | CAS No.    |
|--------------------------|---------------------------|-------------|------------|
| Dibasic Sodium Phosphate | Tribasic Sodium           | 98%         | 10039-32-4 |
| (Dodeca Hydrate)         | Phosphate(Dodeca Hydrate) |             |            |



### 4. First Aid Measures

- A. Eye Contact
- If exposed, rinse eyes immediately with running water more than 20 minutes.
- Take medical treatment from industrial medicine doctor.
- B. Skin Contact
- If exposed, rinse skin immediately with running water more than 20 minutes.
- Take medical treatment from industrial medicine doctor.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-use.
- C. Inhalation
- Take medical treatment from industrial medicine doctor.
- Move to well-ventilated place.
- If breathing is hard, supply oxygen.
- If victim is not breathing, perform artificial respiration.
- D. Ingestion
- Take medical treatment from industrial medicine doctor.
- Do not put anything to eat into unconscious victim's mouth.
- E. Other medical notices.
- Let medical personnel recognize the material and take protective measure.
- 5. Explosion / Fire Fighting Measures
- A. Appropriate (and inappropriate) Extinguishing Media
- Inappropriate : High-pressure water (inappropriate)
- Appropriate:

Great fire : Water spray/mist, normal foam.

Small fire: dry sand, desiccant, alcohol resistant foam, water spray, normal foam, CO2.

- B. Specific Hazards in Presence of Chemical Substances
- If boiled, container may explode.
- Inhalation may be hazardous.
- Heat, spark, and fire can ignite material.
- May burn partly, does not ignite easily.
- Fire may generate irritative and toxic gas from material.
- C. Precaution and Protective equipments for Fire Fighting



- Leakage may cause contamination.
- Dig a ditch to dispose fire fighting water and keep material not dispersed.
- May be transported at high temperature.
- Contact to eyes and skin may cause burn.
- Fire involving Tanks; After extinguish, cool down container with water spray for considerable time
- Fire involving Tanks; Step back immediately if pressure relief device makes loud sound or tank discolors.
- Fire involving Tanks; Do not approach tank in flames.

#### 6. Accidental Release Measures

- A. Require measures and protection to protect human body
- Do not touch and walk on leakage.
- Remove all ignition sources.
- Prevent forming dust.
- Ventilate contaminated area.
- If not dangerous, stop any leakage.
- Take notice of material and condition to avoid.
- B. Required measures to protect environment
- Prevent of inflow into waterway, drain, basement, or closed space.
- C. Purification or removal method
- In case of leakage of powder, cover with plast sheet to prevent spreading and keep it dry.
- In case of small leakage, wash out contaminated area with much water.
- In case of small leakage, use sand and inflammable material to absorb and put in container.

- Use clear shovel to put leakage into dry container and shut loose and move container away from leakage area.

### 7. Handling & Storage

- A. Safe handling
- Give care to high temperature.
- Work in reference to Engineering Controls and Personal Protection.
- Wash thoroughly after handling.
- Pay attention to Conditions and Materials to Avoid.



- B. Safe Storage
- Store in airtight container.
- Store in cool and dry place at below 35°C
- Pay attention to Conditions and Materials to Avoid.

8. Exposure Controls & Personal Protection

- A. Chemical Exposure Limits, Biological Exposure Limit
  - $\bigcirc$  Korean Regulation : No data available
  - $\bigcirc$  ACGIH Regulation : No data available
  - $\bigcirc$  Biological Exposure Limit : No data available
- B. Engineering Controls
- Install local exhaust ventilation, use process isolation or other ways to comply tolerable standard.
- C. Personal Protective Equipment
  - $\bigcirc$  Respiratory Protection
    - Use respiratory protective equipment that is appropriate to exposed material's physical
    - & chemical properties and authorized by Korean Occupational Safety and Health Act.
  - $\bigcirc$  Eyes Protection : Wear dust-proof safety goggles.
  - $\bigcirc$  Hands Protection : Wear appropriate chemical-resistant gloves.
  - $\bigcirc$  Body Protection : Wear appropriate chemical-resistant apron and boots.

9. Physical & Chemical Properties

- A. Appearance: Solid crystallized powder.
- B. Odor: None.
- C. Odor Threshold : None
- D. PH: 1% solution pH 9.0~9.6
- E. Melting point/Freezing point: 35℃ / No data available
- F. Initial Boiling point and Boiling point range: 158°C (insoluble)
- G. Flash point: No data available.
- H. Evaporation Rate: No data available.
- I. Flammability (solid, gas): nonflammable
- J. Low & Upper limit of Flammable or Explosion Range: N/A.
- K. Vapor Pressure: N/A



- L. Solubility: (1) Solubility in water : 7.7%
  - (2) Solubility in Solvents : soluble in Alcohol
- M. Vapor Density: N/A
- N. Specific Gravity: 1.5235
- O. n-Octanol/water partition coefficient: None.
- P. Auto-ignition Temp.: No data available.
- Q. Decomposition Temp.: No data available.
- R. Viscosity: No data available
- S. Molecular Weight: 358.14

## 10. Stability & Reactivity

- A. Chemical stability and Possibility of hazardous reactions
- Stable in condition of normal temperature and pressure. If boiled, container may explode.
- May burn partly, does not ignite easily.
- Fire causes irritative, corrosive, toxic gas from material.
- Inhalation of substance may be hazardous.
- B. Conditions to Avoid : Ignition sources like heat, spark, and fire.
- C. Materials to Avoid : Inflammable materials.
- D. Hazardous Decomposition Products : No data available.

### 11. Toxicological Information

A. Information about possible exposure route : No data available.

### B. Health effect

- $\bigcirc$  Acute oral toxicity:
- ORAL : No data available.
- SKIN : No data available.
- Inhalation : No data available.
- $\odot$  Skin corrosivity or irritation : No data available.
- $\bigcirc$  Severe eye damage or irritation :No data available.
- $\bigcirc\,$  Respiratory sensitization : No data available.
- $\, \odot \,$  Skin sensitization : No data available.
- $\bigcirc$  Carcinogenesis
- Occupational Safety and Helath Act : No data available.



- Ministry of Employment and Labor : No data available
- IARC : No data available
- OSHA : No data available
- ACGIH : No data available
- NTP : No data available
- EU : No data available
- CLP :No data available
- $\bigcirc$  Gamete Mutagenicity : No data available
- $\bigcirc$  Reproductive toxicity :No data available
- $\bigcirc$  Specific target organ toxicity (single exposure) : No data available
- $\bigcirc$  Specific target organ toxicity (repeated exposure) : No data available
- $\bigcirc$  Aspiration Hazard : No data available

### 12. Ecological Information

- A. Aquatic & Eco-toxicity:
- Fish : No data available
- Crustacean : No data available
- Algae : No data available
- B. Residue property and degradability
- Residue property : No data available
- Degradability : No data available
- C. Bioaccumulative potential
- Bioaccumulation : No data available
- Biodegradation : No data available
- D. Movement in soil : No data available
- E. Other hazardous effect : No data available

# 13. Disposal Considerations

- A. Disposal method
- Incinerate.
- Dispose by evaporation and condensation method and incinerate remnants.
- Refine by separation, distillation, extraction, filter method and incinerate remnants.
- Dispose by neutralization, oxidation, reduction, polymerization and condensation reaction and



incinerate remnants or dispose again by condensation, precipitation, filter, dehydration and incinerate remnants.

- B. Disposal Considerations
- Consider precautions in Waste Control Act(if specified).

#### 14. Transport information

- A. UN Number : No data available.
- B. UN proper shipping name : N/A
- C. UN hazardous ranking : N/A
- D. Un package group : N/A
- E. Marine pollutant : No data available
- F. Special precautions:
- In case of fire : N/A
- in case of leakage : N/A

#### 15. Regulatory Information

- A. Regulation by Occupational Safety and Health Act : N/A
- B. The Chemicals Control Act : N/A
- C. Dangerous Material Safety Management Regulation : N/A
- D. Waste Control Act : N/A
- E. Other regulation by Korea and foreign acts
- Korean Regulation
- Persistent organic pollutants control acts : N/A
- Foreign Regulation
- U.S.A management information(OSHA Regulation) : N/A
- U.S.A management information(CERCLA Regulation) : 2267.995 kg 5000lb
- U.S.A management information(EPCRA 302 Regulation) : N/A
- U.S.A management information(EPCRA 304 Regulation) : N/A
- U.S.A management information(EPCRA 313 Regulation) : N/A
- U.S.A management information(Roterdame Protocol) : N/A
- U.S.A management information(Stockholme Protocol) : N/A
- U.S.A management information(Montreal Protocol) : N/A
- EU classification information(Classification) : N/A



- EU classification information(Risk Phases) : N/A
- EU classification information(Safety Phrases) : N/A

#### 16. Other Information

- A. Data Source : Korean Occupational Safety and Health Act.
- B. Date of establishment : June, 3, 1996.
- C. Revision Number and recent revision date : Rev. No.8 / May, 26, 2023.
- D. Others : None.

2020. 10. 26. revision

Hazard classification is not carried out according to Ministry of Employment and Labor Notice No. 2016-19