

Material Safety Data Sheets

1. IDENTIFICATION

Product Name	Di-sodium hydrogen phosphate dihydrate
Other Names	Disodium phosphate dihydrate; Sodium phosphate dibasic dihydrate
Uses	water softening treatment; adjust pH; detergents and cleaning agents
Chemical Family	No Data Available
Chemical Formula	$\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O}$
Chemical Name	
Product Description	No Data Available
Company	Arman sina.co
Contact Information	info@armansina.com www.armansina.com

2. HAZARD IDENTIFICATION

Hazard Categories	Irritant
Signal Word	No Data Available
Hazard Statements	No Data Available
Precautionary Statements	No Data Available

symbol



3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Barium chloride dihydrate	$\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O}$	10028-24-7	≥ 90.00

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.
Eye	In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin	After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.
Inhaled	Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.
Advice to Doctor	Consult a doctor in case of discomfort showing the SDS for the product.

5. FIRE FIGHTING MEASURES

General Measures	Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use water spray/stream to protect personnel and to cool endangered containers. In case of fire: Evacuate area.
Flammability Conditions	No Data Available
Extinguishing Media	The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings
Fire and Explosion Hazard	DO NOT fight fire when fire reaches explosives.
Hazardous Products of Combustion	In case of fire may be liberated: Phosphorus oxides
Special Fire Fighting Instructions	DO NOT fight fire when fire reaches explosives. Protective equipment and precautions for firefighters: Wear a self-contained breathing apparatus and chemical protective clothing.
Personal Protective Equipment	No Data Available
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Clear spills immediately.
Clean Up Procedures	Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal.
Containment	No Data Available
Decontamination	No Data Available
Environmental Precautionary Measures	Do not allow to enter into surface water or drains
Evacuation Criteria	No Data Available
Personal Precautionary Measures	Avoid generation of dust.

7. HANDLING AND STORAGE

Handling	All work processes must always be designed so that the following is as low as possible: Inhalation skin contact Eye contact
Storage	Store in original container.Keep containers tightly closed in a dry, cool and well-ventilated place.
Container	Keep only in the original container or packaging

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No Data Available
Exposure Limits	No Data Available
Biological Limits	No Data Available
Engineering Measures	Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.
Personal Protection Equipment	No Data Available Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn. Eye/face protection Eye glasses with side protection Skin protection Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.
Special Hazards Precautions	No Data Available
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	powder
Odour	no data available
Colour	white
pH	9.1-9.4 (50 g/l; H ₂ O; 20 °C)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	92.5 °C
Freezing Point	No Data Available
Solubility	Solubility in water: 93 g/l (20 °C)
Specific Gravity	No Data Available
Flash Point	No information available.
Auto Ignition Temp	No information available.
Evaporation Rate	No information available.
Bulk Density	2.1 g/cm ³ (20 °C)
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	2.1 g/cm ³ (20 °C)
Specific Heat	No Data Available
Molecular Weight	177.99 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	-5.8 (20 °C; calculated)
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	No information available.
Reactions That Release Gases or Vapours	No information available.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	No Data Available
Chemical Stability	The product is chemically stable under standard ambient conditions (room temperature).
Conditions to Avoid	No further relevant information available.
Materials to Avoid	No Data Available
Hazardous Decomposition Products	Not determined
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	No Data Available
Acute	Acute oral toxicity: LD50: > 17000 mg/kg - Rat - (RTECS) Acute dermal toxicity: no data available Acute inhalation toxicity: no data available

12. ECOLOGICAL INFORMATION

Ecotoxicity	No Data Available
Persistence/Degradability	No Data Available
Mobility	No Data Available
Environmental Fate	No Data Available
Bioaccumulation Potential	No Data Available
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	No Data Available
Special Precautions for Land Fill	No Data Available

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	Di-sodium hydrogen phosphate dihydrate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
EPG	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport

Proper Shipping Name	Di-sodium hydrogen phosphate dihydrate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available

Marine Pollutant	No
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Air Transport

Proper Shipping Name	Di-sodium hydrogen phosphate dihydrate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
	No Data Available

15. OTHER INFORMATION

Revision

3

< Less Than
> Greater Than

Key/Legend

atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO₂ Carbon Dioxide
COD Chemical Oxygen Demand
deg C (° C) Degrees Celcius

deg F (° F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH₂O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH₂O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight