

Safety Data Sheet

acc. to US OSHA GHS

Printing date 04/23/2018

Reviewed on 04/23/2018

* 1 Identification

- . **Product identifier**
- . **Trade name:** **DISODIUM PHOSPHATE DIHYDRATE**
Article number: **AST10008**
- . **Article number:** AST10008
- . **CAS Number:**
10028-24-7
- . **Application of the substance / the mixture** Food additives
- . **Uses advised against** Uses other than those recommended.
- . **Manufacturer/Supplier:**
ICL
622 Emerson Road - Suite 500
St. Louis, Missouri 63141, USA
- . **Information department:** General information: +1 800 244 6169 (Worldwide)
- . **Emergency telephone number:**
In USA call CHEMTREC: (800) 424 9300
Outside the USA, including ships at sea, call CHEMTREC's international and maritime telephone number (collect calls accepted):
+1 (703) 527-3887
In Canada call CANUTEC: 1 613 996 6666

* 2 Hazard(s) identification

- . **Classification of the substance or mixture** Void
- . **GHS label elements** Void
- . **Hazard pictograms** Void
- . **Signal word** Void
- . **Hazard statements** Void

3 Composition/information on ingredients

- . **Chemical characterization:** Substances
- . **CAS No. Description**
10028-24-7 Disodiumphosphate-2-hydrate

* 4 First-aid measures

- . **Description of first aid measures**
- . **General information:** Immediately remove any clothing soiled by the product.
- . **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- . **After skin contact:**
Wash with water and acidic soap.
If symptoms persist consult doctor.
- . **After eye contact:** Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.
- . **After swallowing:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
Do not induce vomiting.
- . **Most important symptoms and effects, both acute and delayed**
Gastric or intestinal disorders
Diarrhea

(Contd. on page 2)

— USA —

Safety Data Sheet

acc. to US OSHA GHS

Printing date 04/23/2018

Reviewed on 04/23/2018

Trade name: **DISODIUM PHOSPHATE DIHYDRATE**

Article number: **AST10008**

(Contd. of page 1)

. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

* 5 Fire-fighting measures

. Extinguishing media

. Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

. For safety reasons unsuitable extinguishing agents: Water with full jet

. Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Phosphorus oxides (P_xO_y)

sodium oxide

. Advice for firefighters

. Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

. Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

* 6 Accidental release measures

. Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Wear protective clothing.

. Environmental precautions: Do not allow to enter sewers/ surface or ground water.

. Methods and material for containment and cleaning up: Pick up mechanically.

. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

. Protective Action Criteria for Chemicals

. PAC-1:

Substance is not listed.

. PAC-2:

Substance is not listed.

. PAC-3:

Substance is not listed.

* 7 Handling and storage

. Handling:

. Precautions for safe handling

Prevent formation of dust.

Ensure good ventilation/exhaustion at the workplace.

. Information about protection against explosions and fires:

The product is not flammable.

No special measures required.

(Contd. on page 3)

— USA —

Safety Data Sheet

acc. to US OSHA GHS

Printing date 04/23/2018

Reviewed on 04/23/2018

Trade name: **DISODIUM PHOSPHATE DIHYDRATE**

Article number: **AST10008**

(Contd. of page 2)

. Conditions for safe storage, including any incompatibilities

. Storage:

. Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

This product is hygroscopic.

. Specific end use(s) No further relevant information available.

* 8 Exposure controls/personal protection

. Additional information about design of technical systems: No further data; see item 7.

. Control parameters

. Components with limit values that require monitoring at the workplace:

OSHA and ACGIH have not established specific exposure limits for this material. However, OSHA and ACGIH have established limits for particulates not otherwise regulated (PNOR) and particulates not otherwise classified (PNOC) which are the least stringent exposure limits applicable to dusts.

OSHA PEL: 15 mg/m³ (total dust) 8-hr TWA, 5 mg/m³ (respirable) 8-hr TWA

ACGIH TLV: 10 mg/m³ (inhalable) 8-hr TWA, 3 mg/m³ (respirable) 8-hr TWA

. Additional information: The lists that were valid during the creation were used as basis.

. Exposure controls

. Appropriate engineering controls Not determined

. Personal protective equipment:

. General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

. Respiratory Protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Dust mask according to DIN EN 140 or 149 (FFP1 or FFP2)

. Protection of hands: Protective gloves

. Material of gloves

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Natural rubber, NR

Chloroprene rubber, CR

. Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

. Eye protection: Safety glasses

. Skin Protection Light weight protective clothing

* 9 Physical and chemical properties

. Information on basic physical and chemical properties

. General Information

. Appearance:

Form: Powder

Color: White

. Odor: Odorless

. Odor threshold: Not applicable

. pH-value: ~9.1

(Contd. on page 4)

Safety Data Sheet

acc. to US OSHA GHS

Printing date 04/23/2018

Reviewed on 04/23/2018

Trade name: **DISODIUM PHOSPHATE DIHYDRATE**
Article number: **AST10008**

(Contd. of page 3)

- . **Change in condition**
 - Melting point/Melting range:** ~ 250 °C (~482 °F)
 - Boiling point/Boiling range:** Undetermined.
- . **Flash point:** Not applicable
- . **Flammability (solid, gaseous):** Product is not flammable.
- . **Auto-ignition temperature:** Not applicable
- . **Decomposition temperature:** Not determined
- . **Danger of explosion:** Product does not present an explosion hazard.
- . **Explosion limits:**
 - Lower:** Not applicable
 - Upper:** Not applicable
- . **Oxidizing properties** None
- . **Vapor pressure:** Not applicable
- . **Density:**
 - Bulk density at 20 °C (68 °F):** ~ 1150 kg/m³
 - Evaporation rate** Not applicable
- . **Solubility in / Miscibility with**
 - Water at 20 °C (68 °F):** ~ 90 g/l
- . **Partition coefficient (n-octanol/water):** ~ -2 log POW
- . **Viscosity:**
 - Dynamic:** Not applicable
 - Kinematic:** Not applicable
- . **Other information** No further relevant information available.

*10 Stability and reactivity

- . **Reactivity** No further relevant information available.
- . **Chemical stability**
- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **Possibility of hazardous reactions** Exothermic reaction.
- . **Conditions to avoid** Exposure to moisture.
- . **Incompatible materials:**
 - alkaloids
 - lead acetate
 - chloral hydrate
 - pyrogallol
 - resorcinol
 - Phenazone
 - Exothermic reaction with acid.
- . **Hazardous decomposition products:**
 - In case of fire, the following can be released:
 - Phosphorus oxides (P_xO_y)
 - sodium oxide

(Contd. on page 5)

— USA —

Safety Data Sheet

acc. to US OSHA GHS

Printing date 04/23/2018

Reviewed on 04/23/2018

Trade name: **DISODIUM PHOSPHATE DIHYDRATE**

Article number: **AST10008**

(Contd. of page 4)

. **Additional information:** This product is hygroscopic.

* 11 Toxicological information

. **Information on toxicological effects**

. **Acute toxicity:**

. **LD/LC50 values that are relevant for classification:**

10028-24-7 Disodiumphosphate-2-hydrate

Oral LD50 >2,000 mg/kg (rat) (OECD 420)

Dermal LD50 >2,000 mg/kg (rat) (OECD 402 READ ACROSS)

. **Primary irritant effect:**

. **on the skin:** Based on available data, the classification criteria are not met.

. **on the eye:** Based on available data, the classification criteria are not met.

. **Sensitization:** Based on available data, the classification criteria are not met.

. **Additional toxicological information:**

. **Carcinogenic categories**

. **IARC (International Agency for Research on Cancer)**

Substance is not listed.

. **NTP (National Toxicology Program)**

Substance is not listed.

. **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

* 12 Ecological information

. **Toxicity**

. **Aquatic toxicity:**

10028-24-7 Disodiumphosphate-2-hydrate

LC50 (96 h) >100 mg/L (rainbow trout) (OECD 203 READ ACROSS)

EC50 (48 h) >100 mg/L (daphnia magna) (OECD 202 READ ACROSS)

. **Persistence and degradability** Inorganic salts are basically not biodegradable.

. **Other information:** Easy elimination possible by flocculation or adsorption by sludge.

. **Behavior in environmental systems:**

. **Components:**

Product should not get in higher quantities into waste water because it may act as a plant nutrient and precipitate heavy metals.

. **Bioaccumulative potential**

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

. **Mobility in soil** No further relevant information available.

. **Ecotoxicological effects:**

. **Other information:**

No COD, no BOD, no AOX

No VOC according to EC-directive 1999/13/EC

. **Additional ecological information:**

. **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

. **Other adverse effects** No further relevant information available.

(Contd. on page 6)

— USA —

Safety Data Sheet

acc. to US OSHA GHS

Printing date 04/23/2018

Reviewed on 04/23/2018

Trade name: **DISODIUM PHOSPHATE DIHYDRATE**

Article number: **AST10008**

(Contd. of page 5)

13 Disposal considerations

. **Waste treatment methods**

. **Recommendation:**

Smaller quantities can be disposed of with household waste.

Can be disposed of with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

. **Uncleaned packagings:**

. **Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

. **UN-Number**

. **DOT, ADN, IMDG, IATA** Void

. **UN proper shipping name**

. **DOT, ADR/RID/ADN, ADN, IMDG, IATA** Void

. **Transport hazard class(es)**

. **DOT, ADR/RID/ADN, ADN, IMDG, IATA**

. **Class** Void

. **Packing group**

. **DOT, ADR/RID/ADN, IMDG, IATA** Void

. **Environmental hazards:** Not applicable.

. **Special precautions for user** Not applicable.

. **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

. **Transport/Additional information:** Not dangerous according to the above specifications.

. **DOT**

. **Hazardous substance:** 5000 lbs, 2270 kg

. **UN "Model Regulation":** Void

* 15 Regulatory information

. **Safety, health and environmental regulations/legislation specific for the substance or mixture**

. **TSCA (Toxic Substances Control Act):** Food additive

. **TSCA new (21st Century Act) (Substances not listed)**

. **National regulations:** Not determined

* 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

. **Department issuing SDS:** Hazard Communication

. **Contact:** MSDS@icl-group.com

. **Date of preparation / last revision** 04/23/2018 / 1

(Contd. on page 7)

— USA —

Safety Data Sheet

acc. to US OSHA GHS

Printing date 04/23/2018

Reviewed on 04/23/2018

Trade name: **DISODIUM PHOSPHATE DIHYDRATE**

Article number: **AST10008**

(Contd. of page 6)

. Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

. Sources source ECHA: European Chemicals Agency, <http://echa.europa.eu/>

. * Data compared to the previous version altered.

— USA —