

Diammonium hydrogenorthophosphate

Revision Date 19.09.19 Version 1.0 Date of previous issue: No Previous Validation US / EN

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade name : Diammonium hydrogenorthophosphate

Use of the Substance/Mixture : Use in the woodworking, textile, paper industries, in the preparation of metal alloys, and also for use as a raw material in the production of mineral fertilizers and in food industry.

Company : **Manufacturer:**
Open Joint-Stock Company "The hydrometallurgical plant"
Russia, 357340, Lermontov, Stavropolskiy reg. st. Promyshlennaya 7

Telephone : **Manufacturer:** +7 (879-35) 3-76-59
Provider: +7 (495) 989-70-73

E-mail address :

Emergency telephone number : Note: please, consult with your local/national competent authorities for the emergency number in your country.

SECTION 2. HAZARDS IDENTIFICATION

Classification and labelling according to HazCom 2012.

Hazard Class and Category Code(s): **Hazard Statement(s):**
Eye irritation, Category 2B Causes eye irritation.
Sensitization – skin, Category 1 May cause an allergic skin reaction.

Hazard pictogram (s) :



Exclamation mark

Signal Word : Warning.

Hazard statements : Causes eye irritation.
May cause an allergic skin reaction.

Precautionary statements : **Prevention:**
Wash hands thoroughly after handling.
Avoid breathing dust.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves.

Response:
If in eyes: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice or attention.
If on skin: Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice or attention.
Specific treatment see on this label.
Wash contaminated clothing before reuse.

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Disposal:

Dispose of contents or container to in accordance with local regulations.

SECTION 3. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical name	Concentration, wt. %	CAS-No
Diammonium hydrogenorthophosphate	≥ 99.5	7783-28-0
Water	≤ 0.3	7732-18-5

SECTION 4. FIRST AID MEASURES

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Take off contaminated clothing and shoes.
- Inhalation : If breathed in, move person into fresh air. Keep patient warm and at rest. Get medical advice or attention if you feel unwell.
- Skin contact : In case of contact, flush skin with soap and plenty of water. If skin irritation persists, call a physician.
- Eye contact : Protect unharmed eye. If easy to do, remove contact lens, if worn. In the case of contact with eyes, rinse with plenty of water and seek medical advice. If symptoms persist, call a physician.
- Ingestion : Rinse mouth with water. Get medical attention if you feel unwell.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media : Use water spray, alcohol-resistant foam.

Unsuitable extinguishing media : Absent.

Unusual fire and explosion hazards

Specific hazards : Hazardous decomposition products may be formed under fire conditions (see section 10).

Special firefighting procedures

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Avoid dust formation. Avoid breathe dust. Avoid contact with skin and eyes.
- Environmental precautions : Do not flush into surface water or sanitary sewer system. Prevent further spillage if safe to do so. Avoid release to the environment.
- Methods for cleaning up : Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Avoid pollution of environment.
- Reference to other sections : See section 8 for personal protective equipment and section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Handling

- Advice on safe handling : For personal protection see section 8. Avoid formation of dust. Avoid breathe dust. Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

- Requirements for storage areas and containers : Store in a place accessible by authorized persons only. Protect from moisture. Keep container in a dry and well-ventilated place. Store in paper bags, plastic bags, fabric polypropylene bags or specialized soft containers.
- Advice on common storage : Incompatible with bases. Do not store together with organic substances and chemical pesticide. Keep away from food, drink and animal feeding stuffs.
- Storage period : 6 month.
- Other data : No data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Contains no substances with occupational exposure limits.

Exposure controls


- Engineering measures : Provide sufficient air exchange and/or exhaust in work rooms. Highly effective exhaust ventilation.

Personal protective equipment

- Respiratory protection : Respirator type N95, N99.

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- Skin and body protection : Protective clothing.
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Eye protection : Safety goggles with clear lenses.
Use equipment for eye protection tested and approved under appropriate government standards US.
- Hand protection : Protective gloves.
Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.
- Personal protective equipment (pictograms) : 
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. General industrial hygiene practice. Avoid breathing dust. Avoid contact with skin, eyes and clothing. When using do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Follow the eyes and face protection plan.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Solid.
- Form : Crystals.
- Color : White.
- Odor : Faint odor.
- Odor threshold : No data available.
- Upper/lower flammability or explosive limits : No data available.
- Vapor density : Not applicable. The product is a solid at normal conditions.
- Vapor pressure : Not applicable. The product is a solid at normal conditions.
- pH : 7.5 – 8.5
- Relative density : No data available.
- Bulk density : No data available.
- Melting point/freezing point : No data available.
- Solubility : No data available.
- Initial boiling point and boiling range : No data available.
- Flash point : Not applicable. The product does not evaporate.
- Evaporation rate : Not applicable. The product is a solid at normal conditions.
- Flammability (solid, gas) : Non-flammable.
- Partition coefficient: n-octanol/water : Not applicable.
- Auto-ignition temperature : No data available.
- Decomposition temperature : No data available.
- Viscosity : Not applicable. The product is a solid at normal conditions.

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	React with bases and strong oxidizing agents; exchange reaction.
Chemical stability	:	No decomposition if stored and applied as directed.
Incompatibility (materials to avoid)	:	Organic substances, pesticides and bases.
Hazardous decomposition products	:	Build-up of dangerous fumes possible in cases of fire: ammonia, phosphorus oxides. When interacting with alkalis, ammonia is released; when treated with strong acids - phosphoric acid.
Hazardous polymerization	:	Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION**Potential acute health effect**

Inhalation : May cause respiratory irritation (not classification).

Eyes : Irritating to eyes.

Skin : Slightly irritating to skin (not classification).

Ingestion : There are no toxicological effects.

Sensitization of the respiratory / skin

Skin sensitization : May cause an allergic skin reaction.

Respiratory sensitization : Non respiratory sensitizing.

Acute toxicityAcute oral toxicity

Diammonium hydrogenorthophosphate : DL₅₀ (rat): > 2 000 mg/kg

Acute dermal toxicity

Diammonium hydrogenorthophosphate : DL₅₀ (rat): > 5 000 mg/kg

Acute inhalation toxicity

Diammonium hydrogenorthophosphate : LC₅₀ (rats): > 5 000 mg/m³ (No mortality)
Exposure time: 4 h

Chronic toxicity

No data available.

Mutagenicity

No mutagenic effect.

Carcinogenicity

No carcinogenic effect.

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Reproductive toxicity

No reproductive effect.

Aspiration hazard

Not applicable. The product is a solid at normal conditions.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to fish:

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Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

Diammonium hydrogenorthophosphate : EC₅₀ (Daphnia magna): > 100 mg/l
Exposure time: 48 h

Toxicity to aquatic plants:

Diammonium hydrogenorthophosphate : EC₅₀ (Pseudokirchneriella subcapitata): > 100 mg/l
Exposure time: 72 h

Long-term study fish/daphnia and other aquatic invertebrates/aquatic plants:

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Methods of disposal

Advice on disposal and packaging : Disposal:
In accordance with local and national regulations. Do not dispose of waste into sewer. This material and its container must be disposed of in a safe way. Do not dispose of together with household waste.
Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14. TRANSPORT INFORMATION

Regulatory information	UN number	Proper shipping name	Class	Packing group
DOT	-	Not dangerous goods.	-	-
ADR / RID	-	Not dangerous goods.	-	-
IMDG	-	Not dangerous goods.	-	-
IATA	-	Not dangerous goods.	-	-

SECTION 15. REGULATORY INFORMATION

Department of transport : Not dangerous goods.

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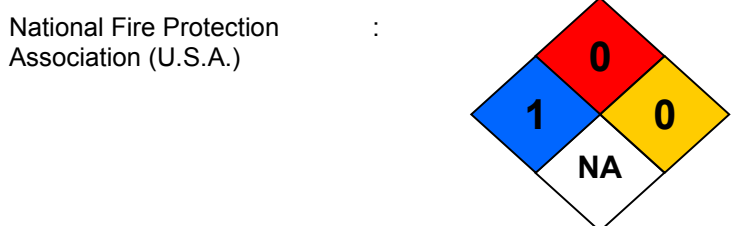
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U.S. Federal Regulations:				
FIFRA	:	40 CFR 180 - Tolerance and Exemptions from Tolerances for Pesticide Chemicals in Food	Diammonium phosphate	Present Section number 180.920

SECTION 16. OTHER INFORMATION

Hazardous Material Information System (U.S.A.) :

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	F



The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.