

MATERIAL SAFETY DATA SHEET



AMMONIUM DIHYDROGEN PHOSPHATE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical product name	:	Ammonium Dihydrogen Phosphate
Common chemical name	:	Ammonium Dihydrogen Phosphate
Synonyms	:	Monoammonium Phosphate
Chemical formula	:	$\text{NH}_4\text{H}_2\text{PO}_4$ = 115.0
CAS no.	:	7722-76-1
EINECS no.	:	231-764-5
Supplier's name	:	Duchefa Biochemie B.V.
Supplier's address	:	A. Hofmanweg 71 2031 BH Haarlem The Netherlands
Emergency telephone	:	(+31) - (0)23 - 5319093

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation:

Chemical name	CAS no.	% (w/w)	Symbol	R phrases
Ammonium dihydrogen phosphate	7722-76-1	> 99	Xi	36/37

3. HAZARDS IDENTIFICATION

Physical/chemical hazards	:	--
Environmental hazards	:	None
Effect(s) of (over)exposure	:	--
Symptom(s) of (over)exposure	:	--
Inhalation	:	Irritating
Ingestion	:	--
Skin contact	:	May cause skin irritation
Eye contact	:	Irritating
Aggravating conditions	:	--

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4. FIRST AID MEASURES

Fresh air. If you feel unwell seek medical advice and show the MSDS if possible

SKIN CONTACT	:	Take off contaminated clothes. Wash skin with soap and copious amounts of water.
EYE CONTACT	:	Rinse eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.
INGESTION, INHALATION	:	If swallowed, wash out mouth with water, provided person is conscious. Consult a doctor. If inhaled, remove from exposure to fresh air. If not breathing, give artificial respiration. Obtain medical attention if ill effects occur.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media	:	Fight fire with water, CO ₂ , powder or foam.
Hazardous thermal decomposition and combustion products	:	Could cause fire in high temperatures. When heated to decomposition material emit toxic fumes (NO _x).
Special fire fighting procedures	:	None
Protection of fire-fighters	:	Fire-fighters must wear self contained breathing equipments and impervious clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Avoid contact with skin and eyes. Do not swallow. Do not breathe dust. Wear suitable protective clothing. Use rubber gloves and eye/face protection.
Environmental precautions	:	Avoid contact with environment
Methods for cleaning up	:	Sweep up the spilled material and collect in a bag or a container for disposal. Avoid forming of dust. Ventilate and wash spill area and wash it with water.

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7. HANDLING AND STORAGE

Handling	:	Use with adequate ventilation. Keep containers closed and moisture free.
Storage	:	Store at room temperature and dry place.
Packaging materials	:	Glass or plastic containers

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures	:	Safety shower and eye bath. Mechanical exhaust required.
Hygienic measures	:	Do not eat, drink and/or smoke during work. Wash after handling
Personal protection	:	
Respiratory system	:	Do not inhale powder use approved respirator
Skin and body	:	Use protective clothing
Hands	:	Use latex or rubber gloves
Eyes	:	Use eye/face protection
Occupational exposure limits	:	
TLV (USA)	:	--
"MAK" (Germany)	:	--
MAC (Netherlands)	:	--

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Crystals
Colour	:	White to colourless
Odour	:	--
Melting point	:	203 - 205 °C (decomposition)
Boiling point	:	--
Density	:	--
Solubility	:	370 g/l in water
pH	:	4.4 (10 g/l in water)
Flash point	:	--
Lower explosion limit	:	--
Upper explosion limit	:	--

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10. STABILITY AND REACTIVITY

Stability	:	Stable at room temperature.
Conditions to avoid	:	Moisture
Materials to avoid	:	Strong oxidizers and strong acids
Hazardous decomposition products	:	Ammonia, NO _x , PO _x , CO, CO ₂
Hazardous polymerization	:	None

11. TOXICOLOGICAL INFORMATION

Acute toxicity	:	--
Intravenous	:	--
Subcutaneous	:	--
Ingestion	:	May be harmful
Inhalation	:	May be harmful, irritating to mucous membranes
Eye irritation	:	Irritating
Skin irritation	:	May cause skin irritation
Sensitization	:	--
Chronic toxicity	:	--
Carcinogenicity	:	None
Mutagenicity	:	None

12. ECOLOGICAL INFORMATION

Mobility	:	--
Persistence and degradability	:	--
Bioaccumulative potential	:	--
Ecotoxicity	:	--

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13. DISPOSAL CONSIDERATIONS

Product:

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge of approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. TRANSPORT INFORMATION

UN Number	:	--
Maximum filling grade tank	:	--
Proper shipping name	:	--
<u>Road/Railway/Inland waterways</u>		
ADR/RID/ADNR Class	:	Non-hazardous for road transport
Hazard identification number	:	--
<u>Sea</u>		
IMDG Class	:	Non-hazardous for sea transport
Packaging group	:	--
<u>Air</u>		
IATA Class	:	Non-hazardous for air transport
Packaging group	:	--
Packing instructions (PA)	:	--
Packing instructions (CAO)	:	--

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15. REGULATORY INFORMATION

Responsibility of the receiver to have knowledge of national and local regulations.

EC Classification

Label name : Irritant

Hazard symbol :



Risk phrases : 36/37: Irritating to eyes and respiratory system.

Safety phrases : 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advise.
37/39: Wear suitable gloves and eye/face protection.

National regulations

WGK (Germany) : 1

Listed on TSCA-inventory : --

Listed on DSL-inventory : --

Listed on AICS-inventory : --

Listed on MITI-inventory : --

16. OTHER INFORMATION

All information given by or on behalf of Duchefa as to properties, specifications, use, etc. of the products is based on research, including literature and is believed reliable.

Duchefa is not liable for any damage a Customer might suffer as a result of the fact that the products the Customer bought from Duchefa prove not to be suitable for the use to which the Customer wishes to apply the products, unless the Customer has been expressly advised by Duchefa in writing in this regard.

Duchefa is not liable for damage caused by the actions or omissions of Customers themselves or by persons appointed by Customers or for whom Customers are otherwise responsible.

In this respect the buyer is obliged to check the quality and all other properties of the products. The buyer assumes all responsibilities connected with the use of the products and information.

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Duchefa does not guarantee the manner of packaging, and/or the quality and/or the properties of the packaging of the goods unless Duchefa itself applied the packaging and/or had it applied and/or packed the goods itself and/or had them packed.

Communications by or on behalf of Duchefa on the quality, the composition, the handling (in the broadest sense of the word), application possibilities, properties and the like of the products supplied by Duchefa do not bind Duchefa unless these communications are made expressly, in the form of a written guarantee.

Furthermore the general terms and conditions of sale are applicable and upon request we will send the complete general terms and conditions of sale.

HISTORY

Printing date : **January 25, 2005**
Date previous MSDS : **January 30, 2003**