

# MATERIAL SAFETY DATA SHEET (SDS/MSDS)

**di-AMMONIUM HYDROGEN  
ORTHOPHOSPHATE ANHYDROUS 97%  
EXTRA PURE**

CAS-No.: 7783-28-0

Product Code: 00229

Molecular Formula:  $(\text{NH}_4)_2\text{HPO}_4$

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product form	:	Substance
Trade name	:	di-Ammonium Hydrogen Orthophosphate Anhydrous 97% Extra Pure
EC-No.	:	231-987-8
CAS No	:	7783-28-0
Synonyms	:	Ammonium phosphate dibasic

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**1.2.1. Relevant identified uses**

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet**

Company : Chemnovo Synthesis Pvt Ltd.  
N-226 Near Kumbhavali Naka  
Tarapur MIDC, Boisar-401 506  
Palghar, Maharashtra  
Telephone : +91 7400096089  
Email: export@chemnovo.in

**1.4. Emergency telephone number**

Emergency number : + 91 7400096089 (9:00am - 6:00 pm)

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye H319

irritation, Category 2

Skin corrosion/irritation, H315

Category 2

Specific target organ H335

toxicity – Single

exposure, Category 3,

Respiratory tract irritation

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36/37/38

Full text of R-phrases: see section 16

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Adverse physicochemical, human health and environmental effects

No additional information available

**2.2. Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP)	:	GHS07 Warning
Hazard statements (CLP)	:	H315 – Causes skin irritation. H319 – Causes serious eye irritation. H335 – May cause respiratory irritation.
Precautionary statements (CLP)	:	P261 – Avoid breathing vapours, dust, fume, gas. P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3. Other hazards**

No additional information available

**SECTION 3: Composition/information on ingredients**

**3.1. Substance**

Name	:	di-Ammonium Hydrogen Orthophosphate Anhydrous 97% Extra Pure
CAS-No.	:	7783-28-0
EC-No.	:	231-987-8

Full text of R- and H-statements: see section 16

**3.2. Mixture**

Not applicable

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

First-aid measures after inhalation	:	Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	:	Wash with plenty of water/.... Wash contaminated clothing before reuse. Get medical advice/attention.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	:	Rinse mouth. Do not induce vomiting.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms/effects after inhalation	:	May cause respiratory irritation.
Symptoms/effects after skin contact	:	Causes skin irritation.
Symptoms/effects after eye contact	:	Causes serious eye irritation.

**4.3. Indication of any immediate medical attention and special treatment needed**

No additional information available

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

Suitable extinguishing media	:	Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	:	Do not use a heavy water stream.

**5.2. Special hazards arising from the substance or mixture**

No additional information available

**5.3. Advice for firefighter**

Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection.
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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**6.1.1. For non-emergency personnel**

Emergency procedures	:	Evacuate unnecessary personnel.
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**6.1.2. For emergency responders**

Protective equipment	:	Equip cleanup crew with proper protection.
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**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up	:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.
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**6.4. Reference to other sections**

No additional information available

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Precautions for safe handling	:	Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do not breathe vapours.
Hygiene measures	:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions	:	Keep container tightly closed. Store in a well-ventilated place.
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**7.3. Specific end use(s)**

No additional information available

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

No additional information available

**8.2. Exposure controls**

Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	[In case of inadequate ventilation] wear respiratory protection.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state	:	Solid
Colour	:	Colorless crystals.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	8
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	155 °C
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1.62 g/cm <sup>3</sup>
Solubility	:	Water: 132.1 g/l at 20 °C
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity**

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**10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No additional information available

**10.4. Conditions to avoid**

Direct sunlight. Air contact. Moisture.

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

No additional information available

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Causes skin irritation.
pH	:	8
Serious eye damage/irritation	:	Causes serious eye irritation.
pH	:	8
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	May cause respiratory irritation.
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

**SECTION 12: Ecological information**

**12.1. Toxicity**

No additional information available

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

No additional information available

**12.4. Mobility in soil**

No additional information available

**12.5. Results of PBT and vPvB assessment**

No additional information available

**12.6. Other adverse effects**

No additional information available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

No additional information available

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / AND

**14.1. UN number**

UN-No. (ADR)	:	Not applicable
UN-No. (IMDG)	:	Not applicable
UN-No.(IATA)	:	Not applicable
UN-No.(AND)	:	Not applicable
UN-No. (RID)	:	Not applicable

**14.2. UN proper shipping name**

Proper Shipping Name (ADR)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

**14.3. Transport hazard class(es)**

ADR

Transport hazard class(es) (ADR)	:	Not applicable
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IMDG

Transport hazard class(es) (IMDG)	:	Not applicable
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IATA

Transport hazard class(es) (IATA)	:	Not applicable
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AND

Transport hazard class(es) (ADN)	:	Not applicable
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RID

Transport hazard class(es) (RID)	:	Not applicable
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**14.4. Packing group**

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

**14.5. Environmental hazards**

Dangerous for the environment	:	No
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Marine pollutant : No  
Other information : No supplementary information available

**14.6. Special precautions for user**

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: Regulatory information**

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

**15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

di-Ammonium Hydrogen Orthophosphate Anhydrous 97% Extra Pure is not on the REACH Candidate List

di-Ammonium Hydrogen Orthophosphate Anhydrous 97% Extra Pure is not on the REACH Annex XIV List

**15.1.2. National regulations**

**Germany**

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Netherlands**

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen -

Vruchtbaarheid

NIET-limitatieve lijst van voor de : The substance is not listed

voortplanting giftige stoffen - Ontwikkeling

**Denmark**

Recommendations Danish Regulation : Pregnant/breastfeeding women working with the product must not be in direct contact with the product

**15.2. Chemical safety assessment**

No additional information available

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**SECTION 16: Other information**

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
R36/37/38	Irritating to eyes, respiratory system and skin
Xi	Irritant

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemnovo Synthesis Pvt Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.chemnovo.in](http://www.chemnovo.in) for additional terms and conditions of sale.

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