# Ammonium phosphate dibasic

sc-202947

**Material Safety Data Sheet** 



**Hazard Alert Code** Key:

**EXTREME** 

**HIGH** 

**MODERATE** 

LOW

### Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### **PRODUCT NAME**

Ammonium phosphate dibasic

### STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

# **NFPA**

### **SUPPLIER**

Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800 **EMERGENCY** 

ChemWatch

Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

### **SYNONYMS**

HPO4·(NH4)2, H9-N2-O4-P, (NH4)2HPO4, "diammonium hydrogen phosphate", "ammonium orthophosphate-mono-H", "diammonium orthophosphate", "diammonium orthophosphate-mono-H", "diammonium phosphate, dibasic", "diammonium phosphate DAP", "diammonium phosphate anhydrous", "ammonium phosphate fertilizer", "ammonium phosphate, secondary", "phosphoric acid, diammonium salt", "secondary ammonium phosphate", "DAP fertilizer", "nitrogen phosphorous fertiliser", fertiliser

### **Section 2 - HAZARDS IDENTIFICATION**

### **CHEMWATCH HAZARD RATINGS**

		Min	Max
Flammability	0		
Toxicity	2		
Body Contact	2		Min/Nil=0 Low=1
Reactivity	0		Moderate=2
Chronic	2		High=3 Extreme=4

### **CANADIAN WHMIS SYMBOLS**



# EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.

May cause long-term adverse effects in the aquatic environment.

### POTENTIAL HEALTH EFFECTS

### **ACUTE HEALTH EFFECTS**

### **SWALLOWED**

- Accidental ingestion of the material may be damaging to the health of the individual.
- As absorption of phosphates from the bowel is poor, poisoning this way is less likely.

Effects can include vomiting, tiredness, fever, diarrhoea, low blood pressure, slow pulse, cyanosis, spasms of the wrist, coma and severe body spasms.

■ Large doses of ammonia or injected ammonium salts may produce diarrhoea and may be sufficiently absorbed to produce increased production of urine and systemic poisoning.

Symptoms include weakening of facial muscle, tremor, anxiety, reduced muscle and limb control.

### FYF

■ This material can cause eye irritation and damage in some persons.

### SKIN

- This material can cause inflammation of the skin oncontact in some persons.
- The material may accentuate any pre-existing dermatitis condition.
- Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.
- Open cuts, abraded or irritated skin should not be exposed to this material.
- Solution of material in moisture on the skin, or perspiration, may increase irritant effects.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.

Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

■ Mild skin reaction is seen with contact of the vapour of this material on moist skin.

High concentrations or direct contact with solutions produces severe pain, a stinging sensation, burns and blisters and possible brown stains

### **INHALED**

■ The material can cause respiratory irritation in some persons.

The body's response to such irritation can cause further lung damage.

■ Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.

■ The highly irritant properties of ammonia vapour result as the gas dissolves in mucous fluids and forms irritant, even corrosive solutions.

Inhalation of the ammonia fumes causes coughing, vomiting, reddening of lips, mouth, nose, throat and conjunctiva while higher concentrations can cause temporary blindness, restlessness, tightness in the chest, pulmonary oedema (lung damage), weak pulse and cyanosis.

### **CHRONIC HEALTH EFFECTS**

■ Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on X-ray.

Sodium phosphate dibasic can cause stones in the kidney, loss of mineral from the bones and loss of thyroid gland function.

Prolonged or repeated minor exposure to ammonia gas/vapour may cause long-term irritation to the eyes, nose and upper respiratory tract. Repeated exposure or prolonged contact may produce dermatitis, and conjunctivitis.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS										
NAME	CAS RN	%								
Ammonium phosphate dibasic	7783-28-0	>98								
Gradually decomposes on exposure to air & evolves										
ammonia	1336-21-6									

### **Section 4 - FIRST AID MEASURES**

### **SWALLOWED**

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

### **FYF**

If this product comes in contact with the eyes

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the
  upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### SKIN

If skin contact occurs

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

### INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

### **NOTES TO PHYSICIAN**

■ Treat symptomatically.

for irritant gas exposures

- the presence of the agent when it is inhaled is evanescent (of short duration) and therefore, cannot be washed away or otherwise removed
- arterial blood gases are of primary importance to aid in determination of the extent of damage. Never discharge a patient significantly
  exposed to an irritant gas without obtaining an arterial blood sample.
- supportive measures include suctioning (intubation may be required), volume cycle ventilator support (positive and expiratory pressure (PEEP), steroids and antibiotics, after a culture is taken
- If the eyes are involved, an ophthalmologic consultation is recommended

For acute or short term repeated exposures to ammonia and its solutions

- Mild to moderate inhalation exposures produce headache, cough, bronchospasm, nausea, vomiting, pharyngeal and retrosternal
  pain and conjunctivitis. Severe inhalation produces laryngospasm, signs of upper airway obstruction (stridor, hoarseness, difficulty in
  speaking) and, in excessively, high doses, pulmonary oedema.
- Warm humidified air may soothe bronchial irritation.
- Test all patients with conjunctival irritation for corneal abrasion (fluorescein stain, slit lamp exam)
- Dyspneic patients should receive a chest X-ray and arterial blood gases to detect pulmonary oedema.

Section 5 - FIRE FIGHTING MEASURES									
Vapour Pressure (mmHG)	Negligible								
Upper Explosive Limit (%)	Not applicable								
Specific Gravity (water=1)	1.62 @ 4 deg. C.								
Lower Explosive Limit (%)	Not applicable								

### **EXTINGUISHING MEDIA**

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

### **FIRE FIGHTING**

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.

### GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Non combustible.
- Not considered a significant fire risk, however containers may burn.

Decomposition may produce toxic fumes of nitrogen oxides (NOx), phosphorus oxides (POx).

May emit poisonous fumes.

May emit corrosive fumes.

Decomposes on heating and produces polyphosphoric acid; toxic fumes of ammonia

### FIRE INCOMPATIBILITY

None known.

### **Section 6 - ACCIDENTAL RELEASE MEASURES**

### MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Control personal contact by using protective equipment.

### **MAJOR SPILLS**

Moderate hazard.

- CAUTION Advise personnel in area.
- Alert Emergency Services and tell them location and nature of hazard.
- Control personal contact by wearing protective clothing.
- Prevent, by any means available, spillage from entering drains or water courses.

### **Section 7 - HANDLING AND STORAGE**

### PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

### **RECOMMENDED STORAGE METHODS**

- Glass container is suitable for laboratory quantities
- DO NOT use aluminium or galvanised containers
- DO NOT use mild steel or galvanised containers
- DO NOT use unlined steel containers
- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

### STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### **EXPOSURE CONTROLS**

Source	Material	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³	Peak ppm	Peak mg/m³	TWA F/CC	Notes
Canada - Ontario Occupational Exposure Limits	diammonium phosphate (Particles		10 (I)						

	(Insoluble or Poorly Soluble) Not Otherwise)		
Canada - British Columbia Occupational Exposure Limits	diammonium phosphate (Particles (Insoluble or Poorly Soluble) Not Otherwise Classified (PNOC))	10 (N)	
Canada - Ontario Occupational Exposure Limits	diammonium phosphate (Specified (PNOS) / Particules (insolubles ou peu solubles) non précisées par ailleurs)	3 (R)	
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	diammonium phosphate (Particulates not otherwise regulated Respirable fraction)	5	
US - California Permissible Exposure Limits for Chemical Contaminants	diammonium phosphate (Particulates not otherwise regulated Respirable fraction)	5	(n)
US - Oregon Permissible Exposure Limits (Z-1)	diammonium phosphate (Particulates not otherwise regulated (PNOR) (f) Total Dust)	10	Bold print identifies substances for which the Oregon Permissible Exposure Limits (PELs) are different than the federal Limits. PNOR means "particles not otherwise regulated."
US - Michigan Exposure Limits for Air Contaminants	diammonium phosphate (Particulates not otherwise regulated, Respirable dust)	5	
US - Oregon Permissible Exposure Limits (Z-1)	diammonium phosphate (Particulates not - otherwise regulated (PNOR)	5	Bold print identifies substances for which the Oregon Permissible Exposure Limits

	(f) Respirable Fraction)					(PELs) are different than the federal Limits. PNOR means "particles not otherwise regulated."
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	diammonium phosphate (Particulates not otherwise regulated (PNOR)(f)- Respirable fraction)		5			
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	ammonia (Ammonia)	25	18	40	30	
US - Minnesota Permissible Exposure Limits (PELs)	ammonia (Ammonia)			35	27	
US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)	ammonia (AMMONIA)	1.7				
US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)	ammonia (AMMONIA)	0.1				
US NIOSH Recommended Exposure Limits (RELs)	ammonia ()	25	18	35	27	
Canada - Alberta Occupational Exposure Limits	ammonia (Ammonia)	25	17	35	24	
Canada - British Columbia Occupational Exposure Limits	ammonia (Ammonia)	25		35		
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	ammonia (Ammonia)			35	27	
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air	ammonia (Ammonia)	50	35			

Contaminants						
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	ammonia (Ammonia)			35	27	
US - California Permissible Exposure Limits for Chemical Contaminants	ammonia (Ammonia)	25	18	35	27	
US - Idaho - Limits for Air Contaminants	ammonia (Ammonia)	50	35			
US ACGIH Threshold Limit Values (TLV)	ammonia (Ammonia)	25		35		TLV® Basis Eye dam; URT irr
US - Alaska Limits for Air Contaminants	ammonia (Ammonia)			35	27	
US - Michigan Exposure Limits for Air Contaminants	ammonia (Ammonia)			35	27	
US - Oregon Permissible Exposure Limits (Z-1)	ammonia (Ammonia)	25	18			Bold print identifies substances for which the Oregon Permissible Exposure Limits (PELs) are different than the federal Limits.
US - Washington Permissible exposure limits of air contaminants	ammonia (Ammonia)	25		35		
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	ammonia (Ammonia)	25		35		
US - Hawaii Air Contaminant Limits	ammonia (Ammonia)	25	18	35	27	
Canada - Northwest Territories Occupational Exposure Limits (English)	ammonia (Ammonia)	25	17	35	24	

Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)	ammonia (Ammonia)	25	17	35	24	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	ammonia (Ammonia)	50	35			
Canada - Nova Scotia Occupational Exposure Limits	ammonia (Ammonia)	25		35		TLV Basis eye damage; upper respiratory tract irritation
Canada - Prince Edward Island Occupational Exposure Limits	ammonia (Ammonia)	25		35		TLV® Basis Eye dam; URT irr
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	ammonia (Ammonia)	50	35			

### **PERSONAL PROTECTION**









### **RESPIRATOR**

- Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 1432000 & 1492001, ANSI Z88 or national equivalent) **EYE**
- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

### HANDS/FEET

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene
- nitrile rubber
- butyl rubber
- fluorocaoutchouc

### **OTHER**

Overalls.

- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

### **ENGINEERING CONTROLS**

■ CARE Explosive vapour air mixtures may be present on opening vessels which have contained liquid ammonia. Fatalities have occurred.

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

### **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

### PHYSICAL PROPERTIES

Solid

Mixes with water.

State	Divided solid	Molecular Weight	132.06
Melting Range (°F)	311 (decomposes)	Viscosity	Not Applicable
Boiling Range (°F)	decomposes.	Solubility in water (g/L)	Miscible
Flash Point (°F)	Not Applicable	pH (1% solution)	8 @ 25 deg. C
Decomposition Temp (°F)	311	pH (as supplied)	Not applicable
Autoignition Temp (°F)	Not applicable	Vapour Pressure (mmHG)	Negligible
Upper Explosive Limit (%)	Not applicable	Specific Gravity (water=1)	1.62 @ 4 deg. C.
Lower Explosive Limit (%)	Not applicable	Relative Vapour Density (air=1)	Not Applicable
Volatile Component (%vol)	Negligible	Evaporation Rate	Not Applicable

### **APPEARANCE**

Available as food grade, technical grade and fertiliser grade. Crystals or powder. Solubility is 58 g/100g at 20 deg. C. Mildly alkaline in reaction. Insoluble in ethanol, alcohol, acetone and ammonia. Odourless but has been reported as having a weak ammonia odour. Gradually decomposes and loses ammonia on exposure to air. This process is accelerated by heating. Slightly hygroscopic and tends to cake on storage. Taste is 'cooling saline'.

### Section 10 - CHEMICAL STABILITY

### **CONDITIONS CONTRIBUTING TO INSTABILITY**

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

### STORAGE INCOMPATIBILITY

- For ammonia
- Ammonia forms explosive mixtures with oxygen, chlorine, bromine, fluorine, iodine, mercury, platinum and silver.
- Fire and/or explosion may follow contact with acetaldehyde, acrolein, aldehydes, alkylene oxides, amides, antimony, boron, boron halides, bromine chloride, chloric acid, chlorine monoxide, o-chloronitrobenzene, 1-chloro-2,4-nitrobenzene, chlorosilane, chloromelamine, chromium trioxide, chromyl chloride, epichlorohydrin, hexachloromelamine, hypochlorites (do NOT mix ammonia with liquid household bleach), isocyanates, nitrogen tetraoxide, nitrogen trichloride, nitryl chloride, organic anhydrides, phosphorous trioxide, potassium ferricyanide, potassium mercuric cyanide, silver chloride, stibine, tellurium halides, tellurium hydropentachloride, tetramethylammonium amide, trimethylammonium amide, trioxygen difluoride, vinyl acetate.
- Shock-, temperature-, and pressure sensitive compounds are formed with antimony, chlorine, germanium compounds, halogens, heavy metals, hydrocarbons, mercury oxide, silver compounds (azides, chlorides, nitrates, oxides).
- Vapours or solutions of ammonia are corrosive to copper, copper alloys, galvanised metal and aluminium. Mixtures of ammonia and air lying within the explosive limits can occur above aqueous solutions of varying strengths.
- Phosphates are incompatible with oxidising and reducing agents.
- Phosphates are susceptible to formation of highly toxic and flammable phosphine gas in the presence of strong reducing agents such as hydrides.

Partial oxidation of phosphates by oxidizing agents may result in the release of toxic phosphorus oxides.

Diammonium phosphate (syn ammonium phosphate, dibasic)

- slowly forms anhydrous ammonia on contact with air
- forms anhydrous ammonia gas on contact with caustics
- reacts violently with strong oxidisers, magnesium, potassium chlorate, strong bases
- reacts with antimony(V) pentafluoride, lead diacetate, magnesium, silver nitrate, zinc acetate

For incompatible materials - refer to Section 7 - Handling and Storage.

### Section 11 - TOXICOLOGICAL INFORMATION

diammonium phosphate

### **TOXICITY AND IRRITATION**

■ Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

### **CARCINOGEN**

ammonia US - Rhode Island Hazardous Substance List IARC

### **Section 12 - ECOLOGICAL INFORMATION**

May cause long-term adverse effects in the aquatic environment.

### **Ecotoxicity**

Ingredient					Persistence: Water/Soil			I	Persistence: Air			Bioaccumulation			Mob	Mobility	
ammonia					LO	LOW			No Data Available			LOW			HIG	HIGH	
GESAMP/EHS COMPOSITE LIST - GESAMP Hazard Profiles																	
Name / EHS Cas No / RTECS No	TRN	A1a	A1b	A1	A2 	B1	B2 	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Diammon 98 ium hydroge n phospha te / CAS:778 3- 28- 0 /	117	0		0	Ino rg	1	NI	0	0	(0)	(1)	(1)			D	1	

Legend: EHS=EHS Number (EHS=GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships) NRT=Net Register Tonnage, A1a=Bioaccumulation log Pow, A1b=Bioaccumulation BCF, A1=Bioaccumulation, A2=Biodegradation, B1=Acuteaquatic toxicity LC/ECIC50 (mg/l), B2=Chronic aquatic toxicity NOEC (mg/l), C1=Acute mammalian oral toxicity LD50 (mg/kg), C2=Acutemammalian dermal toxicity LD50 (mg/kg), C3=Acute mammalian inhalation toxicity LC50 (mg/kg), D1=Skin irritation & corrosion, D2=Eye irritation& corrosion, D3=Long-term health effects, E1=Tainting, E2=Physical effects on wildlife & benthic habitats, E3=Interference with coastal amenities, For column A2: R=Readily biodegradable, NR=Not readily biodegradable. For column D3: C=Carcinogen, M=Mutagenic, R=Reprotoxic, S=Sensitising, A=Aspiration hazard, T=Target organ systemic toxicity, L=Lunginjury, N=Neurotoxic, I=Immunotoxic. For column E1: NT=Not tainting (tested), T=Tainting test positive. For column E2: Fp=Persistent floater, F=Floater, S=Sinking substances. The numerical scales start from 0 (no hazard), while higher numbers reflect increasing hazard. (GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships)

### **Section 13 - DISPOSAL CONSIDERATIONS**

### **Disposal Instructions**

All waste must be handled in accordance with local, state and federal regulations.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. In most instances the supplier of the material should be consulted.

- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Bury residue in an authorised landfill.
- Recycle containers if possible, or dispose of in an authorised landfill.

### **Section 14 - TRANSPORTATION INFORMATION**

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

### **Section 15 - REGULATORY INFORMATION**

### diammonium phosphate (CAS: 7783-28-0) is found on the following regulatory lists:

"Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (English)","Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (French)","Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Persistent and Inherently Toxic to the Environment (PiT) (English)","Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that meet the ecological criteria for categorization (English)","Canada Domestic Substances List (DSL)","Canada Substances in Products Regulated Under the Food and Drugs Act (F&DA) That Were In Commerce between January 1, 1987 and September 13, 2001 (English)","GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO IBC Code Chapter 17: Summary of minimum requirements","International Council of Chemical Associations (ICCA) - High Production Volume List","OECD List of High Production Volume (HPV) Chemicals","US DOE Temporary Emergency Exposure Limits (TEELs)","US EPA High Production Volume Chemicals Additional List","US FDA CFSAN GRAS Substances evaluated by the Select Committee on GRAS Substances (SCOGS)","US FDA Everything Added to Food in the United States (EAFUS)","US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory"

### Regulations for ingredients

## ammonia (CAS: 1336-21-6) is found on the following regulatory lists;

"Canada - Saskatchewan Industrial Hazardous Substances", "Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances", "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (English)","Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (French)", "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Persistent and Inherently Toxic to the Environment (PiT) (English)","Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that meet the ecological criteria for categorization (English)", "Canada Domestic Substances List (DSL)", "Canada Environmental Protection Act (CEPA) 1999 - Schedule 1 Toxic Substances List", "Canada Environmental Quality Guidelines (EQGs) Water: Aquatic life", "Canada Ingredient Disclosure List (SOR/88-64)", "Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS (English)","CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals", "US - California Occupational Safety and Health Regulations (CAL/OSHA) - Hazardous Substances List", "US - Delaware Pollutant Discharge Requirements - Reportable Quantities", "US - Massachusetts Oil & Hazardous Material List", "US - New Jersey Right to Know Hazardous Substances (English)", "US - Pennsylvania -Hazardous Substance List", "US CWA (Clean Water Act) - List of Hazardous Substances", "US CWA (Clean Water Act) - Reportable Quantities of Designated Hazardous Substances", "US Department of Transportation (DOT) List of Hazardous Substances and Reportable Quantities - Hazardous Substances Other Than Radionuclides", "US Department of Transportation (DOT), Hazardous Material Table", "US DOE Temporary Emergency Exposure Limits (TEELs)", "US EPA High Production Volume Chemicals Additional List", "US FDA CFSAN GRAS Substances evaluated by the Select Committee on GRAS Substances (SCOGS)", "US FDA Everything Added to Food in the United States (EAFUS)","US List of Lists - Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112(r) of the Clean Air Act", "US NFPA 45 Fire Protection for Laboratories Using Chemicals - Flammability Characteristics of Common Compressed and Liquefied Gases", "US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide", "US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory"

### **Section 16 - OTHER INFORMATION**

### LIMITED EVIDENCE

- Ingestion may produce health damage\*.
- Cumulative effects may result following exposure\*.
- \* (limited evidence).
- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

  A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.
- For detailed advice on Personal Protective Equipment, refer to the following U.S. Regulations and Standards:

OSHA Standards - 29 CFR:

1910.132 - Personal Protective Equipment - General requirements

1910.133 - Eye and face protection

1910.134 - Respiratory Protection

1910.136 - Occupational foot protection

1910.138 - Hand Protection

Eye and face protection - ANSI Z87.1

Foot protection - ANSI Z41

Respirators must be NIOSH approved.

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Issue Date: Nov-13-2009 Print Date:Feb-15-2012