 CARUS®	<h1 style="margin:0;">AQUA MAG® BLENDED PHOSPHATE</h1> <p style="margin:0;">EC- SAFETY DATA SHEET according to EC directive 2001/58/EC                  MATERIAL SAFETY DATA SHEET</p>
MSDS # CP-343	Revision Date: October 2007
Supersedes: June 2006	

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**Section 1 Chemical Product and Company Identification**

<b>Product Name:</b> AQUA MAG® Blended Phosphate	
<b>Trade Name:</b> AQUA MAG® Blended Phosphate	
<b>Synonyms:</b> Blended Phosphate solution	
<b>Manufacturer's Name:</b> Carus Phosphates, Inc.	<b>Information:</b> (815) 223-1500 (815) 224-6816 (FAX) www.caruschem.com (Web) salesmkt@caruschem.com (Email)
<b>Manufacturer's Address:</b> Carus Phosphates, Inc. 315 Fifth Street Peru, IL 61354, USA	<b>Emergency Telephone:</b> (800) 435 -6856 (USA) (815) 223-1500 (Other countries) CHEMTREC® (800) 424-9300 (USA) (703) 527-3887 (Other countries)

**Section 2 Ingredients Information**

Material	PEL	TLV	CAS.NO.	EC. NO.	%
Diphosphoric acid, disodium salt	No Data	No Data	7758-16-9	<u>231-835-0</u>	1-15
Other non-hazardous ingredients	No Data	No Data	N/A	N/A	50-99

This product contains no toxic chemicals subject to the reporting requirements of Section 313 – Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.	
All the components in this product are generally considered to be safe and none could be classified as hazardous according to the WHMIS system. None are listed on the Canadian Ingredient Disclosure List.	
<b>Carcinogenicity:</b>	Not listed by NTP
<b>Hazard Symbols:</b>	None
<b>Risk Phrases:</b>	22 Harmful if swallowed. 38 Irritating to skin
<b>Safety Phrases:</b>	2 Keep out of reach of children 61 Avoid releases to the environment.

**Section 3 Hazards Identification**

<b>Hazardous Materials Identification System (HMIS) Ratings:</b>	
Health:	1 - Slight
Flammability:	0 - None
Reactivity:	0 - None
Personnel Protective Equipment: goggles, face shield, apron, respirator and proper gloves.	
<b>Inhalation:</b> May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.	
<b>Ingestion:</b> Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. Such effects, however, have occurred. Symptoms may include vomiting, lethargy, diarrhea, blood chemistry effects, heart disturbances and central nervous system effects. The toxicity of phosphates is due to their ability to sequester calcium.	
<b>Skin Contact:</b> May cause irritation. May cause inflammation and pain on prolonged contact, especially with moist skin.	
<b>Eye Contact:</b> May cause irritation, redness and pain.	
<b>Chronic Exposure:</b> May sequester calcium and cause calcium phosphate deposits in the kidneys.	
<b>Aggravation of Pre-existing Conditions:</b> No information found.	

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**Eyes:**  
Immediately flush eyes with large amounts of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface.

**Skin:**  
Immediately wash contaminated areas with water. Remove contaminated clothing and footwear. Wash clothing and decontaminate footwear before reuse.

**Inhalation:**  
Remove person from contaminated area to fresh air.

**Ingestion:**  
Never give anything by mouth to an unconscious or convulsing person. If person is conscious, give large quantities of water or milk. Seek medical attention immediately.

**Section 5 Fire Fighting Measures**

**NFPA\* Hazard Ratings:**

Health:	1	=	Materials which under fire conditions would give off irritating combustion products (less than 1 hour exposure). Materials which on the skin could cause irritation.
Flammability:	0	=	Materials that will not burn.
Reactivity:	0	=	Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water.

Special Hazard: None

**\*National Fire Protection Association 704**

**First Responders:**  
Wear protective gloves, boots, goggles, and respirator. In case of fire, wear positive pressure breathing apparatus. Approach incident with caution.

**Flash Point** None

**Flammable or Explosive Limits** Lower: Nonflammable Upper: Nonflammable

**Extinguishing Media** Use large quantities of water. Dike to contain.

**Section 6 Accidental Release Measures**

**Steps To Be Taken If Material Is Released Or Spilled:**  
Contain spill by collecting the liquid in a pit or holding behind a dam (sand or soil). Absorb with inert media and dispose of properly. Disposal of all materials shall be in full and strict compliance with all federal, state, and local regulations pertaining to phosphates. Flush area with large amounts of water.


**Personnel Precautions:**  
Personnel should wear protective clothing suitable for the task.

**Section 7 Handling and Storage**

**Work/Hygiene Practices:**  
Wash hands thoroughly with soap and water after handling phosphate solution, and before eating or smoking. Wear proper protective equipment. Remove clothing, if it becomes contaminated.

**Ventilation Requirements:**  
Provide sufficient mechanical and/or local exhaust.

**Conditions For Safe Storage:**

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Protect containers from physical damage. Store in a cool, dry area in closed containers.	
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### Section 8 Exposure Controls and Personal Protection

<b>Respiratory Protection:</b> In cases where overexposure to mist may occur, use an approved NIOSH-MSHA mist respirator (N-95 or better). Engineering or administrative controls should be implemented to control mist.
<b>Eye:</b> Face shield, goggles, or safety glasses with side shields should be worn. Provide eyewash in working area.
<b>Gloves:</b> Rubber or plastic gloves should be worn.
<b>Other Protective Equipment:</b> Normal work clothing covering arms and legs, and rubber, or plastic apron should be worn. Caution: If clothing becomes contaminated, wash off immediately.

### Section 9 Physical and Chemical Properties

<b>Appearance And Odor:</b>	Colorless solution, odorless
<b>Boiling Point, 760 mm Hg:</b>	>101 °C
<b>Freezing Point:</b>	< 0 °C
<b>Vapor Pressure (mm Hg):</b>	N/A
<b>Solubility In Water % By Solution:</b>	Miscible in all proportions
<b>Percentage Volatile By Volume:</b>	55% (as water)
<b>Evaporation Rate:</b>	Same as water
<b>Specific Gravity:</b>	1.37 ± 0.03
<b>pH:</b>	4.7 ± 0.5

### Section 10 Stability and Reactivity

<b>Stability:</b>	Under normal conditions, the material is stable.
<b>Conditions To Avoid:</b>	Do not expose to extreme temperatures.
<b>Incompatible Materials</b>	Soluble calcium salt solutions and hydrofluoric or hydrofluosilicic acid could cause precipitations.
<b>Hazardous Decomposition:</b>	When involved in a fire, the material may form toxic fumes of phosphorous oxides.
<b>Condition Contributing To Hazardous Polymerization:</b>	Material is not known to polymerize.

### Section 11 Toxicological Information

<b>Acute Overexposure:</b> Irritating to body tissue with which it comes into contact.
<b>Chronic Overexposure:</b> No known cases of chronic poisoning due to phosphate solutions have been reported. May sequester calcium and cause calcium phosphate deposits in the kidneys.
<b>Carcinogenicity:</b> None of the components have been classified as a carcinogen by OSHA, NTP, and IARC.
<b>Medical Conditions Generally Aggravated by Exposure:</b> Phosphate solution will cause further irritation of tissue, open wounds, burns or mucous membranes.

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**Section 12 Ecological Information**

None

**Section 13 Disposal Considerations**

**Waste Disposal:**  
Disposal of all materials shall be in full and strict compliance with all federal, state, and local regulations pertaining to phosphates. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3.  
**RCRA P-Series:** None listed.  
**RCRA U-Series:** None listed.

**Section 14 Transport Information**

Not regulated by US DOT, Canada TDG, UN, IMDG, IATA regulations

**Section 15 Regulatory Information**

**US Federal Regulations**

**TSCA:**  
All components in this product are listed on the TSCA inventory.

**Health & Safety Reporting List:**  
None of the chemicals in this product are on the Health & Safety Reporting List.

**Chemical Test Rules:**  
None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b:**  
None of the chemicals in this product are listed under TSCA Section 12b.

**TSCA Significant New Use Rule:**  
None of the chemicals in this product have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs:**  
None of the chemicals in this product have an RQ.

**SARA Section 302 Extremely Hazardous Substances:**  
None of the chemicals in this product have a TPQ.

**SARA Codes:**  
Acute


**Section 313:**  
None of chemicals in this product are reportable under Section 313.

**Clean Air Act:**  
This material does not contain any hazardous air pollutants.  
This material does not contain any Class 1 or Class 2 Ozone depletors.

**Clean Water Act:**  
None of the chemicals in this product are listed as Hazardous Substances under the CWA.  
None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**  
None of the chemicals in this product are considered highly hazardous by OSHA.

**State:**  
None of the chemicals in this product are present on state lists from CA, PA, WI, MA, or NJ.

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<b>California Prop 65:</b> California No Significant Risk Level: None of the chemicals in this product are listed.	Page 5 of 6

<b>European/International Regulations</b> <b>European Labeling in Accordance with EC Directives:</b> <b>Hazard Symbols:</b> None <b>Risk Phrases:</b> 22 Harmful if swallowed. 38 Irritating to skin <b>Safety Phrases:</b> 2 Keep out of reach of children 61 Avoid releases to the environment. <b>WGK (Water Danger/Protection):</b> None  <b>Canada - DSL/NDSL:</b> All components are listed on Canada's DSL List <b>Canada - WHMIS:</b> None of the components in this product could be classified as hazardous in accordance with the hazard criteria of the Controlled Products Regulations. <b>Canadian Ingredient Disclosure List:</b> None of the components in this product are listed on the Canadian Ingredient Disclosure List.
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**Section 16 Other Information**

NIOSH:	National Institute for Occupational Safety and Health
MSHA:	Mine Safety and Health Administration
OSHA:	Occupational Safety and Health Administration
NTP:	National Toxicology Program
IARC:	International Agency for Research on Cancer
PEL:	Permissible Exposure Limit
DSL/NDSL:	The Domestic Substances and the Non-Domestic Substances List (Canada)
TLV-TWA:	Threshold Limit Value-Time Weighted Average
CAS:	Chemical Abstract Service
EINECS:	Inventory of Existing Chemical Substances (European) (EC. No.)

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Chithambarathanu Pillai

October 2007

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## Univar USA Inc Material Safety Data Sheet

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For Additional Information contact MSDS Coordinator during business hours, Pacific time: (425) 889-3400

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